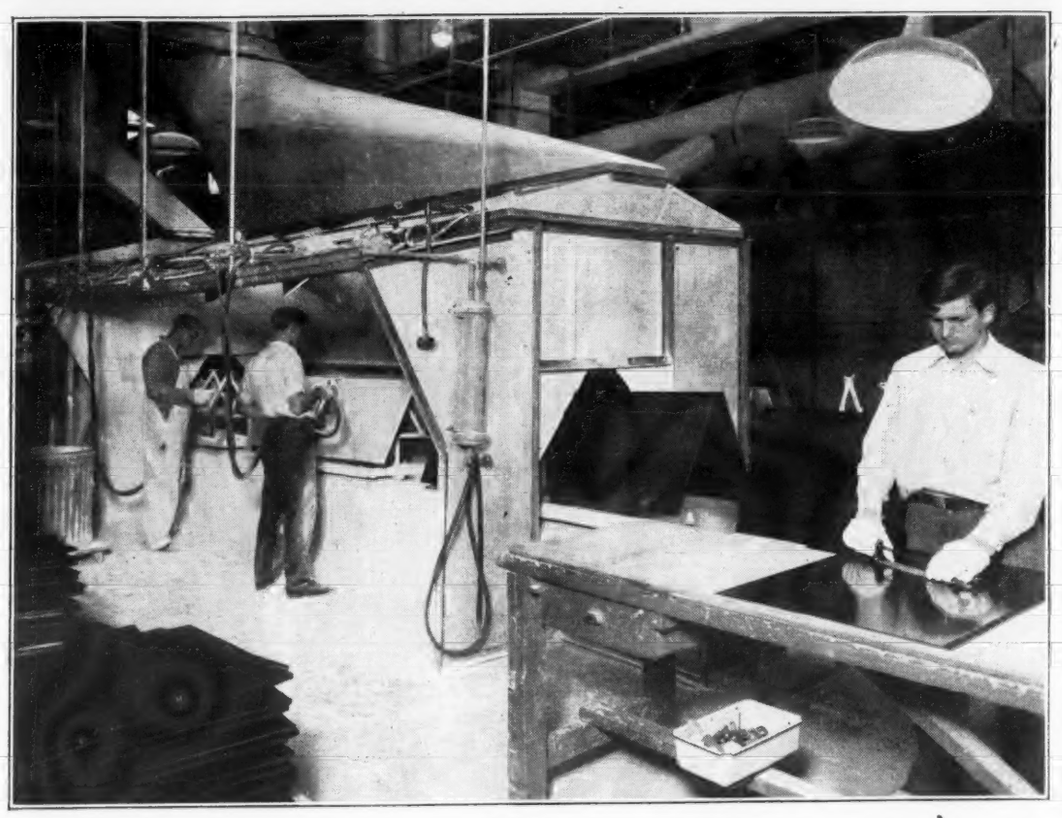
Electric Refrigeration Factories In Action

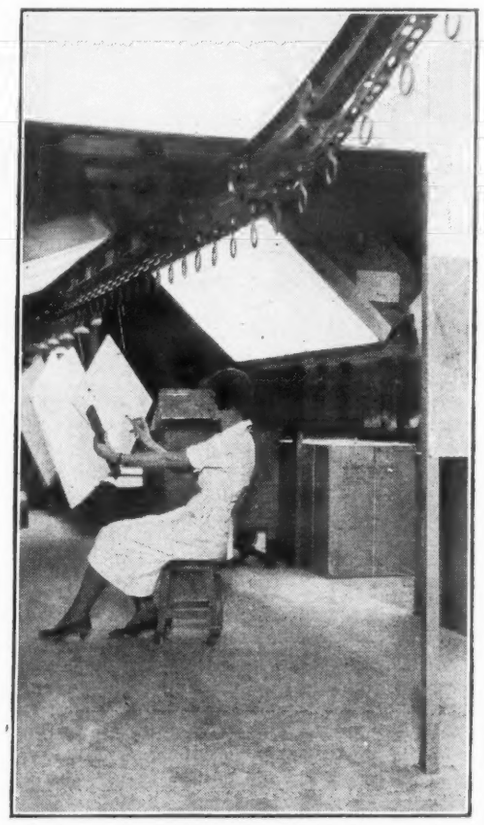
Final cabinet assembly of models 454 and 504 Apex refrigerators, at the Ft. Wayne, Ind., plant where Apex Rotarex Corp, purchased the refrigeration activity from Wayne Home Equipment Co.



Applying porcelain enamel to panels for Frigidaire cabinets at its Moraine plant. The inspector (right) is checking the ground coat before the panels go to the sprayers (left) for the second coat.

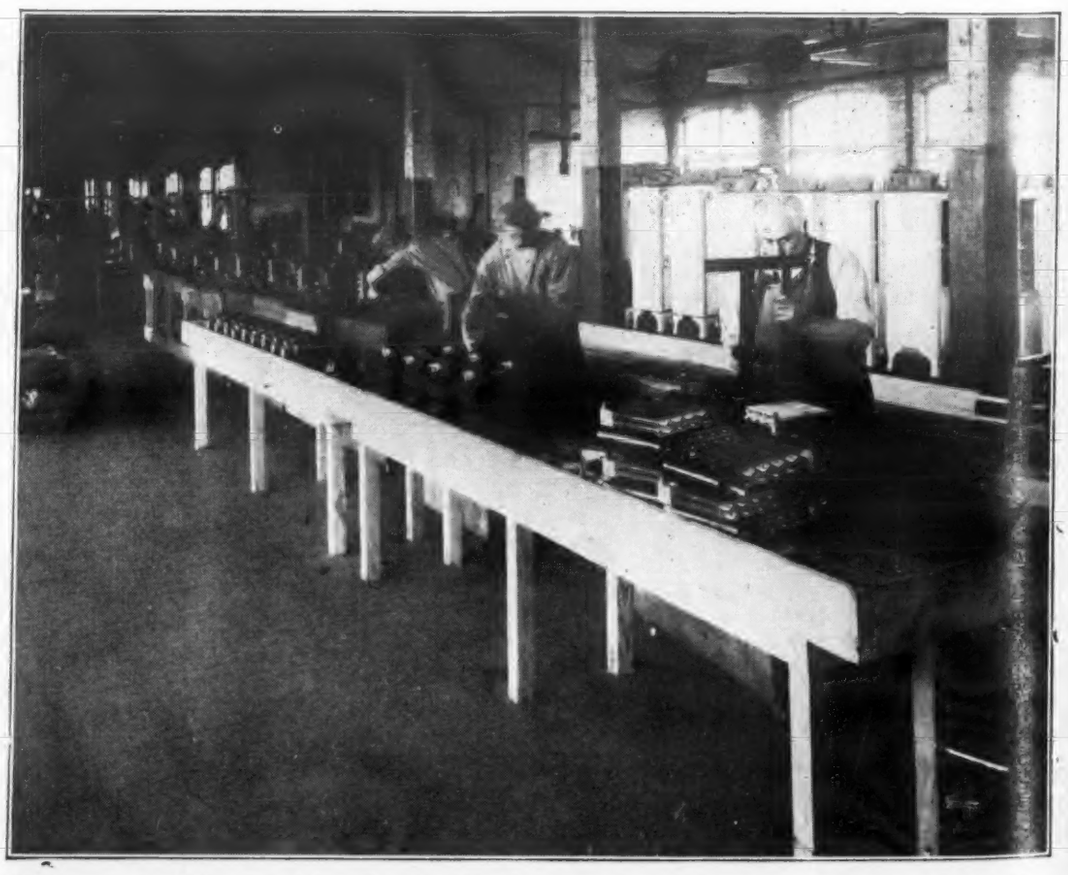
Workman in a Frigidaire production line inspecting the performance of a machine in a domestic model.

Girls in the Frigidaire factory applying the black edges, and giving the final touches to porcelain-on-steel hydrators which will shortly go into refrigerator cabinets. Girls perform many operations in the Frigidaire plant that require quick and nimble fingers.



Clear and colored lights behind a screen create synthetic daylight for inspecting Frigidaire's porcelain.

Assembly line of the Consolidated Soda Fountain Corp., Greenville, Mich., where Copeland-Consolidated ice cream cabinets are made. The workman in the foreground is installing corkboard insulation. Angle iron construction is used.



Workmen assembling machines for the Chilrite electric refrigerator in the factory of the Narragansett Machine Co., Pawtucket, R. I., where they are made. In the background appear some of the cabinets used by this manufacturer.

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N.E.L.A. Report Number

Merchandising Section

ELECTRIC REFRIGERATION NEWS

Registered U. S. Patent Office.

The business newspaper of the refrigeration industry

In Three Parts
Part One

ISSUED EVERY TWO WEEKS
VOL 5, NO. 21, SERIAL NO. 123

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TWO DOLLARS PER YEAR

WILLIAMS' SALES FOR MAY SHOW RECORD INCREASE

Adoption of Distributor Plan Brings Results

BLOOMINGTON, Ill.—May has been written into the books of the Williams Oil-O-Matic Heating Corp. as the most successful month in the Ice-O-Matic history of the organization, with sales showing an increase of 500 per cent over May, 1930.

Night shifts are being operated in many of the departments in order to meet production demands.

"At the beginning of this year," C. U. Williams, president of the company, said, "we switched over from the direct dealer to the distributor plan. Since that time we have signed many large distributor organizations in the country.

"Our present production is based on five per cent of the N. E. L. A. figure of 1,000,000 units for 1930. This figure is in turn, broken down and each distributor has a quota assigned him.

"Distributors who are now handling the Ice-O-Matic line are: Jenkins Music Co., Kansas City; Sampson Electric Co. Chicago; Brown & Hall Supply Co., St. Louis; Grinnell Bros. Music House, Detroit; Schmoller & Mueller Piano Co., Omaha; Essex Distributing Corp., Newark; Standard Distributing Corp., Milwaukee, and the D. L. Whittle Music Co. of Dallas.

"We expect to have a total of 60 distributors signed in the near future.

"Our export Ice-O-Matic shipments in May showed an increase over May, 1930.

N.E.M.A. TO COMPILE FIGURES BY MONTHS

DETROIT—Statistics of the electric refrigeration industry will be collected on a yearly basis for the years 1928 and 1929, and on a monthly basis for 1930 and 1931, by the refrigeration division of the National Electrical Manufacturers Association, according to Louis Ruthenburg, chairman of the division.

NEMA headquarters will solicit the cooperation of non-member manufacturers in the compiling of the statistics, states Mr. Ruthenburg, who has just made public the proceedings of the division meeting held at the Kelvinator factory here, May 27.

The statistics will be compiled on a new form suggested by P. B. Zimmerman, manager of the refrigeration department of the General Electric Co.

Glenn Muffly, consulting engineer for Copeland Products, Inc., has been appointed to assist in the promulgation of the American Standards Association refrigeration code, under the direction of NEMA headquarters.

The arrangement enables Mr. Muffly to continue to act in a consulting capacity to Copeland, according to Mr. Ruthenburg.

Harry M. Williams of Frigidaire has reported the development of a proposed method of testing domestic equipment.

(Concluded on Page 4, Column 5)

NORGE CORP. REPORTS RECORD SALES MONTH

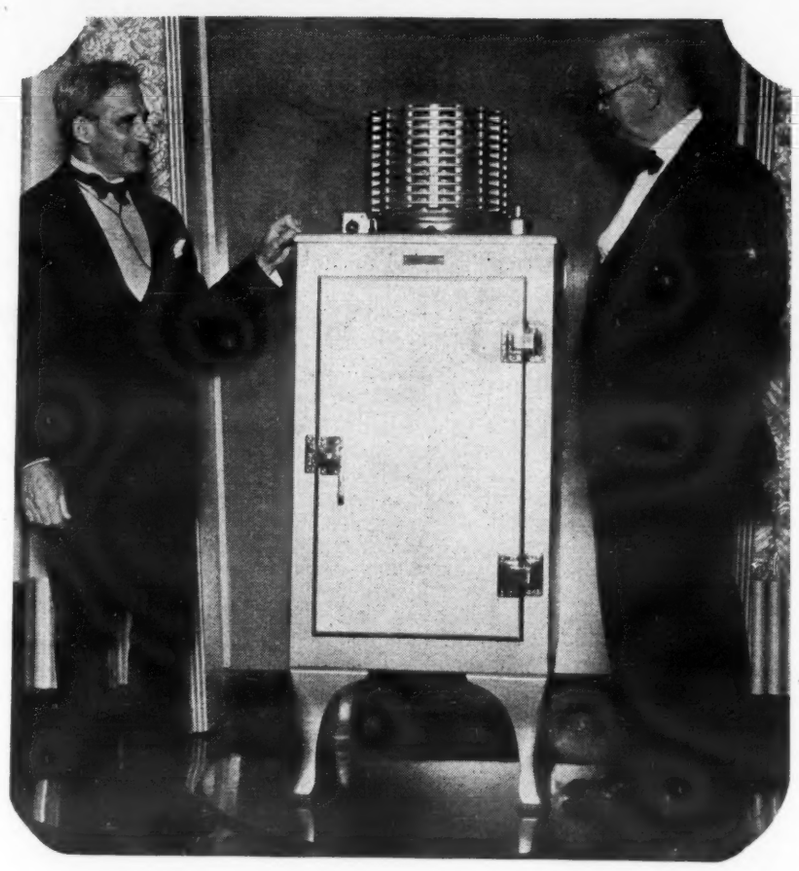
DETROIT—May sales of the Norge Corp., equalling 98.1 per cent of the company's entire output in 1930, was the best month in the history of the organization, according to John H. Knapp, vice president of the company.

"The summary for the first five months of this year shows a net gain of 547 per cent over the same period last year. We are planning an immediate production increase of 100 per cent," stated Mr. Knapp.

ILLINOIS COMMISSION WILL STUDY UTILITY SELLING

SPRINGFIELD, Ill.—Instead of recommending Rep. Roy R. Barnes' bill to prohibit public utilities from engaging in the retail business, a legislative sub-committee recommended to the house public utilities committee Wednesday, June 10, that a commission be empowered to investigate the subject during the coming biennium and report to the 1933 legislature.

Millionth G. E. to Henry Ford



Arthur Brisbane (right), and Gerard Swope, president of General Electric Co., examine the millionth G. E. refrigerator, which is to be presented to Henry Ford.

R. M. A. SHOW DRAWS COMPANION EXHIBITS

By William E. Gobble

CHICAGO—Electric refrigerators of three companies managed to find a place on the stage when the show of the Radio Manufacturers' Association opened last week at the Stevens Hotel. Though the convention and show were primarily for the radio industry, Starr, Mohawk and Zerozone machines were on exhibition for the thousands of makers and dealers in electrical products who thronged to the many displays of radio ware.

Improvement of radio advertising was urged by Morris Metcalf, president of the Radio Manufacturers' Association, in addressing the association's convention at the Hotel Stevens.

Mr. Metcalf predicted the continuance of overproduction difficulties until the

(Concluded on Page 2, Column 1)

SWOPE TO PRESENT MACHINE OVER RADIO

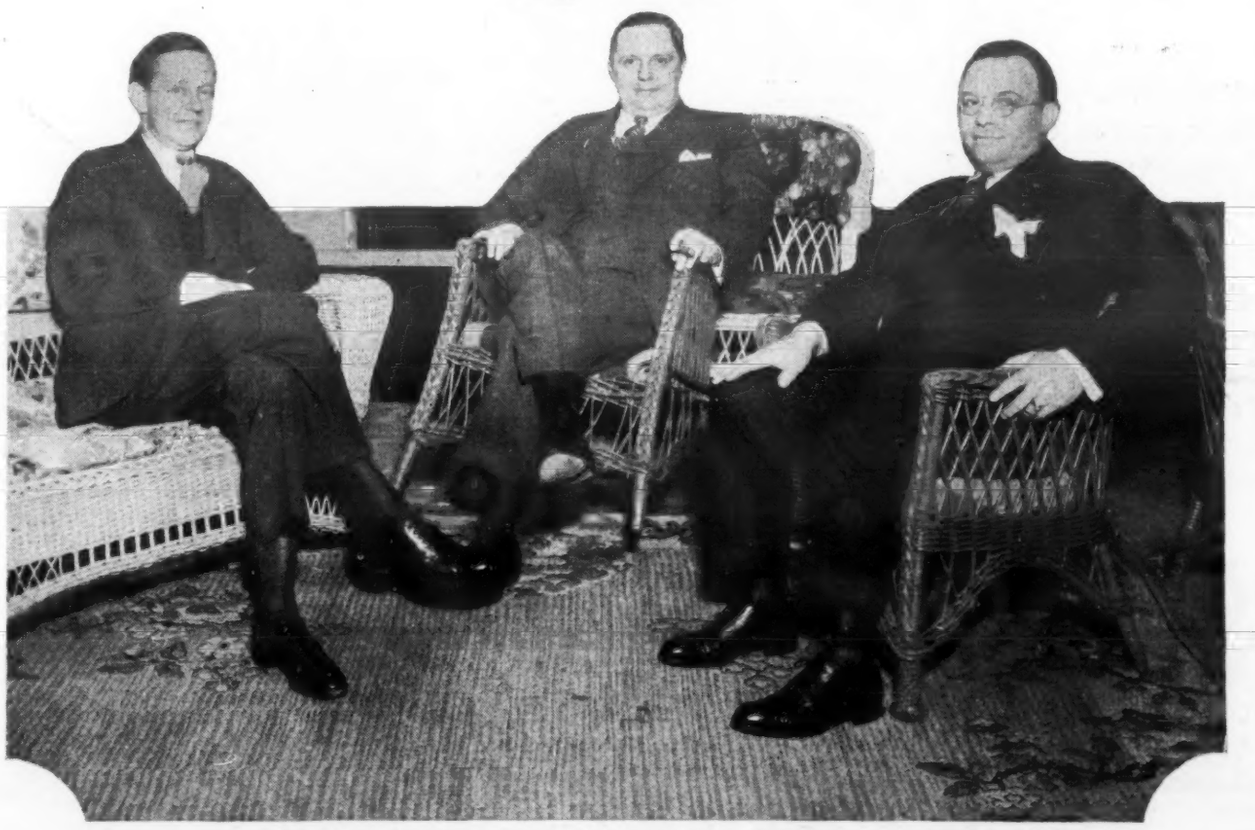
NEW YORK CITY—Radio listeners who are tuned in on the NBC program Saturday night, June 20, will hear Gerard Swope, president General Electric Co., who will present the one millionth General Electric refrigerator to Henry Ford for the latter's Edison Institute of Technology, located in Detroit.

Mr. Swope, in the National Broadcasting Co. studios in New York City, will make the presentation, while Mr. Ford, in his Edison Institute in Detroit, will accept the gift.

Floyd Gibbons, radio celebrity, author and war correspondent, will be in Detroit to describe the scene at the institute to the radio audience.

John S. Young, NBC announcer, will announce the program from New York. A special program of music has been arranged by the G. E. orchestra.

Big Three



Annual sales of electric refrigeration equipment totalling close to two hundred million dollars are represented by the triumvirate of executives above. (Left)—T. K. Quinn, vice president of General Electric Co., (center) George W. Mason, president of Kelvinator Corp., and (right) E. G. Biechler, president of Frigidaire Corp.

Utilities Decide To Fight Government Interference

By George F. Taubeneck

ATLANTIC CITY, N. J.—"Fight" was the watchword of the fifty-fourth convention and exhibition of the National Electric Light Association, held here June 8 to 12. Vigorous attacks were made upon Senator Norris and other "enemies of the public utilities" throughout the sessions. Almost every speaker deplored "governmental interference with legitimate business," and all agreed that the time had arrived when the utilities should strike back at their adversaries. Obviously on the defensive, central station representatives who spoke before the convention spent most of their time answering charges brought by proponents of government ownership, and branded the latter as "socialists who wish to communize all industry."

In opening the first general session Tuesday morning, June 9, President W. Alton Jones, first vice president of Henry L. Doherty & Co., declared:

"We cannot afford to remain silent in the face of false charges and unwarranted attacks. I strongly urge that the leaders of this business aggressively follow up the matter of answering such attacks through public statements and paid advertisements."

Doherty, Owens Agree

Similar recommendations were made by Henry L. Doherty; J. F. Owens of the Oklahoma Gas & Electric Co., president-elect of the N. E. L. A.; Marshall E. Sampsell, president of the Central Illinois Public Service Co. and vice president of the N. E. L. A.; Edwin Gruhl of the North American Co., vice president of the N. E. L. A.; T. O. Kennedy of the Ohio Public Service Co., chairman of the commercial national section of the N. E. L. A.; C. E. Groesbeck, president of the Electric Bond & Share Co.; Harry Reid of the National Electric Power Co., chairman of the N. E. L. A. public relations national section; W. C. Mullendore, vice president of the Southern California Edison Co., and other speakers.

Anticipating the unusually small attendance, members of the program committee arranged entertainment of high order, and secured speakers of national reputation to attract more delegates.

Editors on Program

Among those who appeared on the platform were David Lawrence, publisher of *The United States Daily;* Gus W. Dyer, editor of the *Southern Agriculturalist;* Loring A. Schuler, editor of the *Ladies' Home Journal;* Gerard Swope, president of the General Electric Co.; Merle Thorpe, editor of *Nation's Business;* M. H. Aylesworth, president of the National Broadcasting Co.; and Arthur Brisbane, editor of the Hearst publications.

Vincent Lopez and his orchestra provided music for the evening entertainments and for women's functions. Following a reception to President and Mrs. Jones Monday night, Lopez music provided incentive for dancing in the Auditorium ballroom. More Lopez music and more dancing came Wednesday and Thursday nights.

Indian Pageant Presented

With a cast selected from various Indian tribes of the Southwest, a pageant, "The First American," was presented Tuesday night. This dramatic panorama of Indian life was a condensed version of the four-day pageant which is performed annually at Albuquerque, N. M.

Headlining the singers in this pageant were Princess Lou-Scha-Enya, a beautiful Zuni Indian girl with a fulsome contralto voice; Chief Yowlache, a mighty-voiced baritone; Chief Taptuka, Hopi tenor; Haske Naswood, Navajo baritone; Jules Verne Allen, cowboy tenor with a repertoire of frontier ballads; Law-Tsa-Deet-Sa, Ze-Wah-Coo, Blue Sky Eagle, and Wayne Wolf Robe.

Graham McNamee acted as announcer for the pageant, and Vincent Lopez and his orchestra presented a program of Indian music.

Princess Lou-Scha-Enya and Chief Yowlache appeared again at the public policy session Thursday night, which was broadcast over the NBC network. Most applauded was Jessica Dragonette, winsome young soprano, who was called upon for encore after encore.

Arthur Brisbane addressed this session, and Preston S. Arkwright, chairman of the public policy committee, presented a very brief report from that committee, and acted as master of ceremonies.

Women's activities included an 18-hole golf tournament, a putting contest, a

(Concluded on Page 4, Column 1)

Bureau Leaders Seek Statistics

ATLANTIC CITY, N. J.—"Let us have statistics," was the cry of the public utility representatives who gathered with representatives of manufacturers, the Electric Refrigeration Bureau, and ELECTRIC REFRIGERATION NEWS here early in the morning of June 11 to discuss Bureau activities.

Guided by figures furnished him by several manufacturers, Chairman J. E. Davidson conjectured that some 400,000 electric refrigerators were sold during the first five months of the campaign to sell 1,000,000 electric refrigerators in 1931, and that the various divisions of the Bureau activity averaged 81.5 per cent of their to-date quota.

The Middle West division has sold 136 per cent of its quota for the first quarter, and the Rocky Mountain division has also topped its quota with 106 per cent, according to Mr. Davidson.

"We must get better cooperation in the gathering of statistics on this campaign," declared Mr. Davidson. "Figures should be supplied quarterly and even monthly on sales by states and in outstanding cities. We must know where we are going, and how fast we are getting there."

C. L. Edgar of the Edison Electric Illuminating Co. of Boston, representing the New England division, stated that splendid cooperation had been manifest in his division save on the matter of getting the exact number of sales from different outlets. Distributors, he said, are not willing to give out figures for states or territories.

"I would like to know the number of refrigerators sold in our territory," said C. L. Law of the New York Edison Co., New York City, in presenting his report. "Important cities in New York have had committee meetings, established bureaus, and held exhibits; but we have no way to check the results."

C. E. Michel of the Union Light & Power Co., St. Louis, declared that it was important to see to it that this

(Concluded on Page 2, Column 4)

DRY-ZERO RECORDS SHATTERED IN MAY

CHICAGO—All records for shipments during a single month were broken during May by the Dry-Zero Corp. of Chicago, manufacturers of pliable slab and blanket insulation. During the month 112 carloads of Dry-Zero pliable slab alone were shipped from the company's plant here, according to Harvey Lindsay, president.

Including the record breaking May shipments the company's business for the first five months of the current year has surpassed the entire output for 1930.

Seventy-five per cent of last month's shipments was pliable slab insulation shipped to refrigerator manufacturers. In this field the two largest users are Borg-Warner for its Norge refrigerators and Grigsby-Grunow for its Majestic refrigerators. A considerable proportion of Dry-Zero's increased business is the result of the large production of these two manufacturers who use this material exclusively for the major insulation in their cabinets.

An interesting sidelight on the record-smashing shipments is that the 112 carloads of material weighed only approximately 600,000 pounds.

CHICAGO RADIO SHOW DRAWS COMPANION EXHIBITS

(Concluded from Page 1, Column 4)

manufacturers would be willing to furnish and be guided by statistical information provided by the whole industry.

Referring to the patent interchange agreement, Mr. Metcalf said: "It now seems possible that something resembling a patent pool may come into being as a result of the ownership of the important patents by one group or from legislation which will demand that the industry and the public be freed from the present burden of litigation."

Who's Who With Westinghouse

Merchandising ideas emanate from this group of Westinghouse executives. Left to right: Carl D. Taylor, assistant merchandising sales manager; M. C. Morrow, merchandising sales manager; R. S. Tritle, vice president and general manager; C. E. Allen, commercial vice president, and N. G. Symonds, commercial vice president.

LET OUR OFFICE BE YOUR OFFICE
for handling all credit and collection detail!

A deferred payment sale can be made to net as much as a cash sale. Here is where C. I. T. is an invaluable aid.

The dealer who sells on the C. I. T. Plan is not only certain he has the correct markup, but certain also that he is keeping his financing overhead at rock-bottom. The C. I. T. Office *nearest you* will take over full responsibility for the credit, collection, and other instalment detail which experience proves can be handled most efficiently and most economically by specialists.

Apart from the physical burden it relieves you of, C. I. T. Service provides a new source of funds that will enable you to keep your own capital liquid... ready for instant use as profitable opportunities occur.

C.I.T. Financing Plans are available to dealers in all approved makes of mechanical refrigerators. Our large volume of business keeps our rates consistently low. And our reputation for dependability has been earned by more than two decades of conscientious service.

C.I.T. CORPORATION
ONE PARK AVENUE, NEW YORK
A Unit of
COMMERCIAL INVESTMENT TRUST CORPORATION
CAPITAL AND SURPLUS OVER $90,000,000
Subsidiary and Affiliated Operating Companies with Head Offices in New York
Chicago ~ San Francisco ~ Toronto ~ London ~ Berlin ~ Brussels ~ Paris
Copenhagen ~ Havana ~ San Juan, P. R. ~ Mexico City ~ Buenos Aires
Sao Paulo ~ Sydney, Australia ~ Offices in more than 160 cities.

THESE C. I. T. LOCAL OFFICES
WILL WELCOME YOUR INQUIRY

Abilene ~ Akron ~ Albany ~ Allentown ~ Altoona ~ Amarillo
Asbury Park ~ Atlanta ~ Augusta ~ Baltimore ~ Beckley
Binghamton ~ Birmingham ~ Bloomington ~ Bluefield ~ Boise
Boston ~ Bristol ~ Bronx ~ Brooklyn ~ Buffalo ~ Butte ~ Camden
Charleston ~ Charlotte ~ Chicago ~ Cincinnati ~ Clarksburg
Cleveland ~ Columbia ~ Columbus ~ Dallas ~ Davenport
Dayton ~ Denver ~ Des Moines ~ Detroit ~ El Paso ~ Erie
Fort Wayne ~ Fort Worth ~ Fresno ~ Glens Falls ~ Grand
Rapids ~ Green Bay ~ Greensboro ~ Greenville ~ Hagerstown
Harrisburg ~ Hartford ~ Hempstead ~ Hickory ~ Houston
Huntington ~ Indianapolis ~ Jackson ~ Jacksonville
Jamaica ~ Jamestown ~ Jersey City ~ Kansas City ~ Kenosha
Knoxville ~ Lansing ~ Lexington ~ Lincoln ~ Little Rock ~ Los
Angeles ~ Louisville ~ Madison ~ Manchester ~ Memphis
Miami ~ Milwaukee ~ Minneapolis ~ Minot ~ Montgomery
Montpelier ~ Mt. Vernon ~ Nashville ~ Newark ~ New Haven
New Orleans ~ New York ~ Norfolk ~ Oklahoma City
Omaha ~ Orlando ~ Philadelphia ~ Phoenix ~ Pittsburgh
Portland, Me. ~ Portland, Ore. ~ Poughkeepsie ~ Providence
Raleigh ~ Reading ~ Reno ~ Richmond ~ Roanoke
Rochester ~ Sacramento ~ St. George ~ St. Louis ~ Salt
Lake City ~ San Antonio ~ San Diego ~ San Francisco
San Jose ~ Seattle ~ Sioux Falls ~ South Bend ~ Spokane
Springfield ~ Spring Valley ~ Stockton ~ Syracuse ~ Tampa
Toledo ~ Tucson ~ Tulsa ~ Utica ~ Washington ~ Wheeling
White Plains ~ Wichita ~ Wilkes-Barre ~ Youngstown.

Bureau Chiefs Ask For Statistics

(Concluded from Page 1, Column 4)

Electric Refrigeration Bureau activity is continued through a three-year period.

"Unless we can obtain sales figures which can be divided up in a manner which the sales executive can present to the chief executive of his company, and thus secure his continued interest," maintained Mr. Michel, "we may have difficulty arousing enthusiasm for campaigns for 1932 and 1933."

Two difficulties were reported by H. L. Pinkerton of the Albuquerque Gas & Electric Co. of Albuquerque, N. M. The first was trouble experienced in getting dealers to cooperate—there was scant material available with which to sell them on the idea. The second difficulty was in getting figures.

"We think our campaign has been fairly successful," said Mr. Pinkerton. "But we can't seem to get the proper information on the number of units sold. I believe this is important in connection with progress reports."

P. B. Zimmerman, manager of the electric refrigeration department of the General Electric Co., and H. W. Burritt, Kelvinator vice president in charge of sales, referred to the recent agreement of the refrigeration division of the National Electrical Manufacturers Association to furnish quarterly statistics, and promised to help the Bureau get the statistics it wanted.

"I do not believe the dealers know just what activities are going on," averred Carl Taylor, chief of the Westinghouse refrigerator department. "We must tell the story in trade journals, particularly ELECTRIC REFRIGERATION NEWS, which is the Bible of the dealers."

Chairman Davidson agreed that one failure of the bureau has been that of collecting information on its activities throughout the nation, and getting the story over to the dealers through trade papers. Mr. Zimmerman concurred with this criticism.

"If the Electric Refrigeration Bureau had been in existence a year and a half ago," declared W. R. Putnam of the Electric Bond & Share Co., New York City, "there would have been no question before us of killing anti-merchandising bills which have appeared in legislatures this year.

"The Bureau has been very helpful in developing a better feeling toward the utilities on the part of the dealers. In the territory covered by the Electric Bond & Share organization, 64 per cent of the electric refrigeration business is done by dealers, and only 36 per cent by utilities."

C. J. Strike of the Northwestern Public Service Co., Huron, N. D., observed that in his division three problems had presented themselves: forestalling "what happened in Kansas" (passage of a bill prohibiting public utilities from merchandising appliances), trying to organize dealers, and making merchants out of dealers.

"We have experienced considerable difficulty in organizing dealers," said Mr. Strike. "The story of this cooperative activity needs to be broadcast more fully if we are to convince dealers that this is an effective campaign."

According to G. M. Gadsby of the Utah Power & Light Co., Salt Lake City, splendid cooperation from all the dealers in his territory has been given to the campaign.

A. E. Ward of the Associated Gas & Electric System, stated that in employe cooperative drive which began May 11, his organization has sold 68 per cent of a quota of 5,300 machines.

By June 27, the closing date of the System's drive, 10,000 refrigerators will have been sold, Mr. Ward predicts. During the drive employes have furnished 25,000 prospects, which resulted in 5,000 sales.

"Our terms are more liberal than the manufacturers will give to their dealers," said Mr. Ward, "so we are extending our terms to them.

"Dr. George W. Allison has been very effective in his work with our employes. I commend him to all of you who have not yet had the benefit of his services."

Fall Activities

George Reichert of the Niagara Hudson Power Corp., Buffalo, N. Y., stated that Bureau meetings in his division had been well attended. Plans are being laid for two special activities in his territory, one in September and one during the Christmas holidays, to tie in with the national program. As a result of these two campaigns, Mr. Reichert looks for a 100 per cent increase in sales over last year.

According to M. E. Jacobs of the Nebraska Power Co., Omaha, power and light companies have been spending approximately 10 cents per domestic meter on this campaign in his territory.

It was suggested by Mr. Zimmerman that steps be taken to get more manufacturers to support the program. At least 12 other companies should be included, he thought.

Attendance List

Those present were:

Electric Refrigeration Bureau representatives: J. E. Davidson, chairman of the executive committee of Electric Refrigeration Bureau of the Nebraska Power Co., Omaha, Nebr.; C. E. Greenwood, commercial director, and G. W. Allison, refrigeration manager of the National Electric Light Association, New York City; and W. E. Underwood, of Lord & Thomas and Logan, New York City.

Manufacturers' representatives: Geo. Durban, Frigidaire Corp., Dayton, Ohio; M. C. Morrow, C. E. Allen, Marshall Adams, and Carl D. Taylor of the Westinghouse Electric & Mfg. Co., Mansfield, Ohio; P. B. Zimmerman, W. J. Daily, T. K. Quinn, and H. H. Bosworth of the General Electric Co., Cleveland, Ohio; and H. W. Burritt, Kelvinator Corp., Detroit, Mich.

Utility representatives: W. R. Putnam, Electric Bond & Share Co., New York City; M. E. Jacobs, Nebraska Power Co., Omaha, Nebr.; C. L. Edgar of the Edison Electric Illuminating Co., Boston, Mass.; A. V. S. Lindsey, Connecticut Light & Power Co., Hartford, Conn.; L. O. Ripley, Kansas Gas & Electric Co. Wichita, Kan.; C. J. Strike, Northwestern Public Service Co., Huron, N. D.; C. E. Michel, Union Light & Power Co., St. Louis, Mo.; G. M. Gadsby, Utah Power & Light Co., Salt Lake City, Utah; A. E. Ward, Associated Gas & Electric System, New York City; C. L. Law, New York Edison Co., New York City; H. L. Pinkerton, Albuquerque Gas & Electric Co., Albuquerque, N. M.; Geo. Reichert, Niagara Hudson Power Corp., Buffalo, N. Y., and A. Emory Wishon, Pacific Gas & Electric Co., San Francisco, Calif.

ELECTRIC REFRIGERATION NEWS: F. M. Cockrell, and George F. Taubeneck, Detroit, Mich.

COPELAND PREDICTS INCREASE IN PROFITS

MT. CLEMENS, Mich.—For the seven month period ending May 31, 1931, net profit of Copeland Products, Inc., according to Louis Ruthenburg, president of the company, is likely to exceed profit for the fiscal year ended October 31, 1930.

Net profit of $107,039, after all charges and federal taxes, was reported by Copeland for the year ended October 31, 1930.

"May unit shipments and net sales were above corresponding figures for April," Mr. Ruthenburg stated.

In his statement Mr. Ruthenburg says "Net profits for the fiscal period (in anticipation of closing the May statement) are forecast as substantially greater than those for the entire fiscal year of 1929-1930. Cash position is correspondingly improved, all bank loans having been liquidated as of May 15th.

"Inventories in the factory, branches and in the hands of distributors and dealers are substantially below last year's levels."

SCHOLEM WINS SALES CONTEST AT LITTLE ROCK

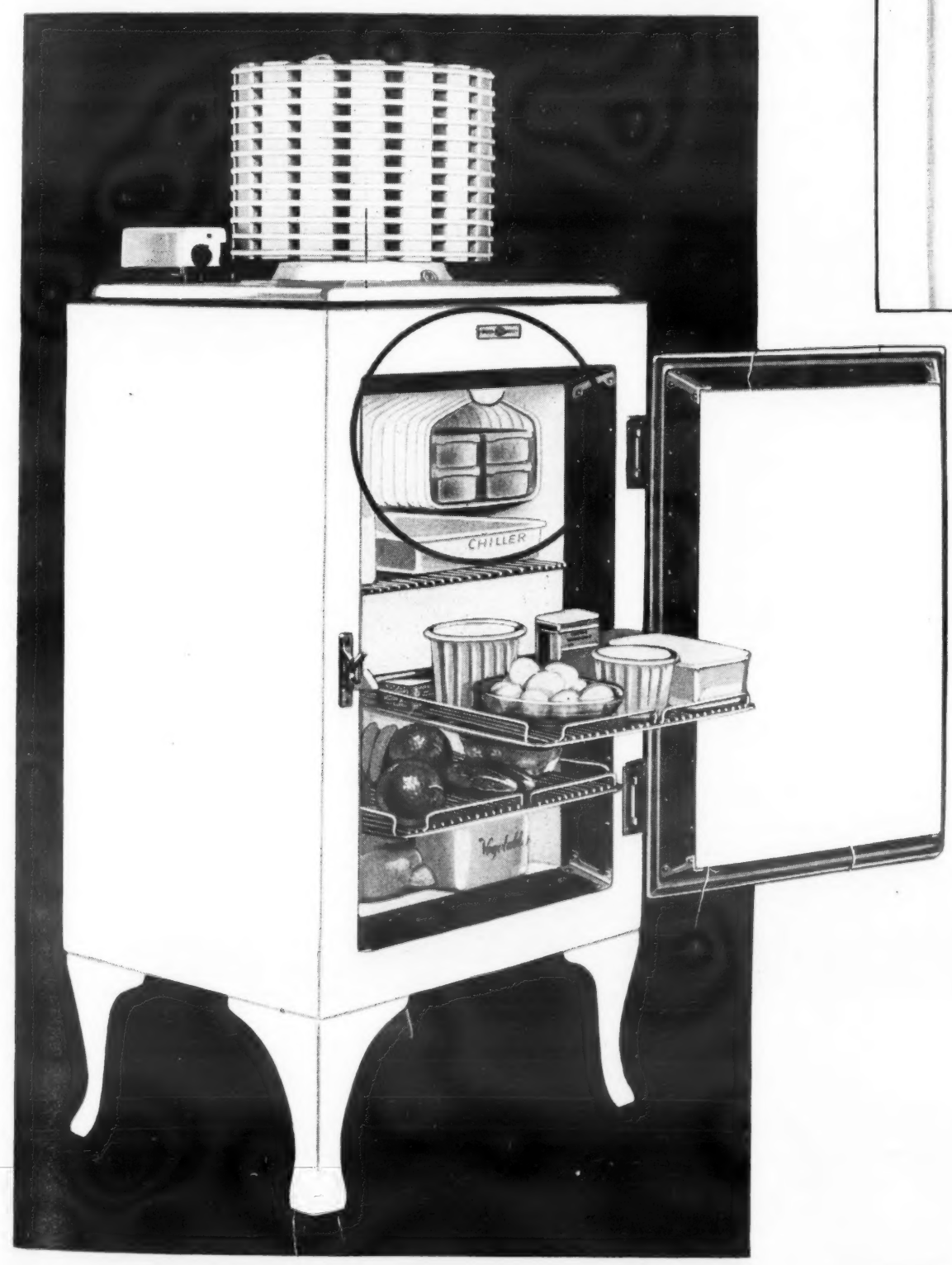
LITTLE ROCK, Ark.—In a recent sales contest conducted by 555, Inc., distributor for Kelvinator, Jess M. Scholem, a veteran retail salesman, won first honors. Second place went to Luther F. Baker, and third to Ernest Bolding.

GENERAL ELECTRIC'S SANITARY SUPER-FREEZER

is making BUYERS out of prospects . . .

INVEST IN AN ELECTRIC REFRIGERATOR

SLIDING SHELVES bring food in easy reach; exclusive with General Electric.



■ Here's one very important feature that has contributed to the outstanding sales success of General Electric Refrigerators . . . the Sanitary Super-Freezer. Prospects become buyers when they see and learn the advantages of this simple, hygienic super-freezer.

• Look it over yourself. See how progressive design has arranged the ice cube trays for quick, easy removal. Examine the smooth gleaming white porcelain surface . . . inside and out. Wide open . . . sanitary . . . clean and easy to keep clean.

• Practical people want this sort of simplicity, this cleanliness. They appreciate the Monitor Top, and its flawless operation. They like the exclusive sliding shelves that make food easy to reach in the General Electric . . . that make it possible to utilize every bit of the roomy interior storage space. They want the positive protection of a cabinet that's steel — ALL-steel. They like the complete 3-Year Guarantee . . . a warranty that protects them against service expense . . . that covers the ENTIRE General Electric Refrigerator . . . all models.

• Consider all these things . . . these General Electric features. Then consider the outstanding performance record that more than a million General Electric Refrigerators have established. You'll understand why General Electric All Steel Refrigerators sell so easily and STAY sold . . . constantly setting new records in sales and dealer profits.

• General Electric Company, Electric Refrigeration Department, Section D F 62, Hanna Building, 1400 Euclid Ave., Cleveland, Ohio.

The program for June 20th will feature the presentation of the 1,000,000th General Electric refrigerator to Henry Ford for the Edison Institute of Technology. The presentation will be made by Gerard Swope, president of the General Electric Co. Erno Rapee will conduct the General Electric Orchestra.

GENERAL ELECTRIC

ALL-STEEL REFRIGERATOR

DOMESTIC, APARTMENT HOUSE AND COMMERCIAL REFRIGERATORS · ELECTRIC WATER COOLERS

CELEBRITIES APPEAR ON N.E.L.A. PROGRAM

(*Concluded from Page 1, Column 5*)

croquet tourney, obstacle golf, dart throwing, a card party, and a tea.

The mammoth Auditorium hall was filled with exhibits of electrical equipment, supplies, and merchandise. Manufacturers had representatives stationed at their various booths to explain the displays to all visitors who entered. A complete report of the refrigeration exhibits at the convention will be found in the *Engineering Section* of this issue.

General sessions were held Tuesday, ings. Then- shrdl cmfw shrd etaoinm Wednesday, Thursday, and Friday mornings. The accounting and engineering sections, and the women's committee, met Tuesday afternoon. The commercial section convened Wednesday afternoon, while the public relations section had a lengthy program Thursday afternoon.

"Edison Day" was celebrated at the third general session, Thursday morning. From his winter home in Fort Myers, Fla., Mr. Edison's voice was carried by telephone to the assembly.

(Complete reports of the speeches which had bearing upon the refrigeration industry, and which might otherwise prove of interest to readers of the NEWS, will be found in following pages of this issue). The complete program follows:

First general session:

"Welcome to Atlantic City," by Harry Bacharach, mayor of Atlantic City, N. J.

Addresses of welcome by President W. Alton Jones of Henry L. Doherty & Co., New York City, Treasurer P. S. Young of the Public Service Electric & Gas Co., Newark, N. J., and Managing Director Paul S. Clapp, New York City.

"A Long Look Ahead in Business," by David Lawrence, publisher *The United States Daily*, Washington, D. C.

"The Job Ahead," by Harry Reid, chairman, Public Relations National Section, National Electric Power Co., New York, N. Y.

"The Electric Revolution," by Gus W. Dyer, editor, *Southern Agriculturalist*, Nashville, Tenn.

"Constitution and By-Laws Committee," by R. F. Pack, chairman, Northern States Power Co., Minneapolis, Minn.

"Energy Through Space," demonstration of electronics experiments by the General Electric Co., under the direction of Larry Hawkins.

Second General Session:

"The 1931 Exhibition," by E. W. Goldschmidt, chairman, exhibition committee, Wagner Electric Corp., New York, N. Y.

"The Commercial Challenge," by T. O. Kennedy, chairman, commercial national section, the Ohio Public Service Co., Cleveland.

Address by Henry L. Doherty, Henry L. Doherty & Co., New York City.

"Electric Refrigeration Sales Program," by J. E. Davidson, chairman, Electric Refrigeration Bureau, Nebraska Power Co., Omaha, Neb.

"Trade Relations," by J. F. Owens, president-elect, N. E. L. A., Oklahoma Gas & Electric Co., Oklahoma City.

"Group Team Work: Requisite for Full Electrical Development," by Marshall E. Sampsell, vice president N. E. L. A., Central Illinois Public Service Co., Chicago.

"In the Public Interest," by W. C. Mullendore, vice president, Southern California Edison Co., Ltd., Los Angeles, Calif.

Third General Session:

"What the Engineers Are Doing," by Alex D. Bailey, chairman, engineering national section, Commonwealth Edison Co., Chicago, Ill.

"Brakes on Prosperity," by C. E. Groesbeck, president, Electric Bond & Share Co., New York City.

"Employe Insurance," by Gerard Swope, president, General Electric Co., New York City.

"Our Vanishing Economic Freedom," by Merle Thorpe, editor *Nation's Business*, Washington, D. C.

Telephone greetings from Thomas A. Edison, Fort Myers, Fla.

Fourth General Session:

"Memorials," by W. H. Onken, Jr., vice president, Security Owners Association, New York City.

"Security Racketeering," by Harry Van Horn, manager, Columbus Better Business Bureau, vice president, Affiliated Better Business Bureaus of the United States and Canada, Columbus, Ohio.

"The Accountant's Field," by Franklyn Heydecke, chairman, accounting national section, Public Service Electric & Gas Co., Newark, N. J.

"Rewards of Merit," by Frank W. Smith, chairman, prize awards committee, the United Electric Light & Power Co., New York City.

"Television,—Where, When and Why?" by M. H. Aylesworth, president, National Broadcasting Co., New York City.

"Ghosts," by Edwin Gruhl, vice president, N. E. L. A., the North American Co., New York City.

Accounting Section Session:

Opening address by Franklyn Heydecke, chairman, accounting national section, Public Service Electric & Gas Co., Newark, N. J.

"Coordinating Accounting and Public Relations," by John L. O'Toole, vice president, Public Service Corp. of New Jersey, Newark, N. J.

"How to Fail," by Fred D. Van Amburgh, editor, *The Silent Partner*, New York City.

"The Relations of the Engineer and Accountant," H. W. Fuller, chief engineer, Byllesby Engineering & Management Corp., Chicago.

Engineering Section Session:

Opening address by Alex D. Bailey, chairman, engineering national section, Commonwealth Edison Co., Chicago.

"An Economic Waste," by George N. Tidd, president, American Gas & Electric Co., New York City.

"The Air Pollution Problem," by Harvey N. Davis, president, Stevens Institute of Technology, Hoboken, N. J.

"Metropolitan Distribution Costs," by A. C. Marshall, vice president, and H. A. Snow, assistant controller, the Detroit Edison Co., Detroit.

Women's Committee Session:

"The Women's Committee's First Ten Years," by Martin J. Insull, president, Middle West Utilities Co., Chicago.

"What the Electrical Industry Expects from Its Women Employes in the Future," by J. F. Owens, president-elect, N. E. L. A., Oklahoma Gas & Electric Co., Oklahoma City.

"The Home Ten Years from Now," by Loring A. Schuler, editor, *Ladies' Home Journal*, Philadelphia.

"Our Electric Household Equipment Paid for Itself," by Mrs. Ralph Borsodi, Suffern, N. Y.

"The Home Service Program of the N. E. L. A.," by Miss Ada Bessie Swann, Home Service Director, Public Service Electric & Gas Co., Newark, N. J.

Commercial Section Session:

Introductory discussion by T. O. Kennedy, chairman, commercial national section, the Ohio Public Service Co., Cleveland.

"Progress in the Power Field," by W. H. Sammis, chairman, commercial and industrial power and heating bureau, the Commonwealth & Southern Corp., New York City.

"Field Activities of the Electric Refrigeration Bureau," by George W. Allison, refrigeration manager, N. E. L. A., New York City.

"Small Appliances as Load Builders," a presentation of the merchandise sales committee.

"Volume and Density in Domestic Sales," by Samuel Ferguson, president, the Hartford Electric Light Co., Hartford, Conn.

"Let's Do the Job Right," by J. H. Van Aernam, merchandise sales committee, N. E. L. A.

"The Commercial Man in Public Relations," by Horace P. Liversidge, vice-president, Philadelphia Electric Co., Philadelphia.

Public Relations Section Session:

Opening remarks by Harry Reid, chairman, public relations national section, National Electric Power Co., New York City.

"Publicity and Advertising Problems," by Joseph G. Groce, chairman, advertising and publicity committee, the Edison Electric Illuminating Co., Boston.

"Our Customer Owners," by James B. Black, chairman, customer ownership committee, the North American Co., New York City.

"Government in Business," by Homer L. Ferguson, president, Newport News Shipbuilding & Drydock Co., past president, Chamber of Commerce of the United States of America, Newport News, Va.

"Employe Training," by Homer E. Niesz, chairman, industrial relating committee, Commonwealth Edison Co., Chicago.

"The First Ten Years," by Miss Clara H. Zillessen, chairman, women's committee, Philadelphia Electric Co., Philadelphia.

"The Industry's Voice," by W. S. Vivian, chairman, public speaking committee, Middle West Utilities Co., Chicago.

"Public Contacts," by Martin J. Insull, president, Middle West Utilities Co., Chicago.

Servel Shows New Models

Two large Hermetic models, 7 and 9 cu. ft., were displa yed in the Servel exhibit at Atlantic City. Artistically lighted, the row of models stood out in sharp relief. Water coolers and a cutaway model were also shown.

Attendance

Apex

Apex Rotarex Corp., Cleveland, was represented by Walter Frantz, vice president in charge of manufacturing, Cleveland; R. J. Strittmatter, vice president in charge of sales, Cleveland; L. A. Dexter, factory representative, Philadelphia; Ed. LeVee, Eastern sales manager, New York City; J. P. Hackenburg, Eastern refrigeration promotion manager, New York City; R. E. Sargent, manager, vacuum cleaner promotion, Cleveland.

Frigidaire

Frigidaire Corp., Dayton, Ohio, was represented by: E. G. Biechler, president; J. A. Harlan, vice president in charge of sales; E. D. Doty, advertising manager; A. D. Farrell, manager of exhibits; A. C. Freiman, water cooler division; A. L. McMillan, service department; C. T. Mutchner, manager publicity department; R. B. Ambrose, commercial department.

J. B. Reeves, regional manager, Atlanta, Ga.; H. H. Kennedy, regional manager, Dayton, Ohio; J. L. Knighton, regional manager, Washington; C. M. Eakin, regional manager, New York City; Al. Hattenbach, Pittsburgh distributor; R. F. Trant and Walter Mason, Norfolk distributors.

The following representatives attended from Frigidaire's public utility division: G. S. Jones, G. E. Durban, J. A. Borland, F. J. Cotton, R. H. Pocock, J. H. Knight, L. S. Kimball, T. S. Supplee, W. R. Winans.

General Electric

The General Electric delegation included the following refrigeration men: T. K. Quinn, vice president; P. B. Zimmerman, general manager, refrigeration department; W. J. Dailey, sales promotion manager, refrigeration department; J. J. Donovan, manager, apartment house division; W. E. Landmesser, manager, commercial division; H. H. Bosworth, manager, central station division; M. F. Mahoney, manager, sales operations division; George Chapman, assistan sales manager, refrigeration department; A C. Noll, manager, product division; W. M. Timmerman, manager, commercial engineering division.

Miss Edwina Nolan, director, home service division; Fred E. Bollmeyer, sales promotion division; J. M. Walker, central station division; Harry W. Kumler, central station division; M. T. Bard, commercial division; H. T. Hulett, commercial engineer; George Miller, district representative; Fred Harvey, district representative; J. T. Dickson, sales promotion division; F. M. Corliss, engineer, product division; O. C. Hamilton, sales promotion division.

General Electric distributors were: Rex Cole, New York City; C. L. McCrea, Washington, D. C.; P. J. Harrison, Newark, N. J.; W. L. Driscoll, Charlotte, N. C.; Clark Adams, Atlantic City, N. J.; N. K. Ovalle, Harrisburg, Pa.

Kelvinator

Kelvinator Corp., Detroit, was represented by: G. W. Mason, president; H. I. Burritt, vice president in charge of sales; H. A. Lewis, treasurer and director of export sales; J. S. Sayre, sales manager; A. M. Taylor, advertising manager; J. M. Fernald, commercial sales manager; Guy Pollard, chief inspector; V. C. Woodcox, sales promotion manager.

Campbell Wood, director of utility sales; John Wyllie, Jr., engineering department; S. R. Kemp, western utility division, Chicago; L. H. Huntoon, sales department; J. C. Burton, Pennsylvania district manager; R. I. Petrie, Eastern regional manager; Ray Martin, service department; George Smith, production department; F. J. Foersterling, district manager, Philadelphia.

Kulair

From Kulair Corp., Philadelphia, came the following: W. W. Moss, president, Philadelphia; E. S. Lape, secretary-treasurer, New York City; F. W. Wiggins, production manager, Richmond, Ind; John Wiggins, assistant production manager, Richmond, Ind.; Harold Leischiowitz, assistant sales manager, Harrisburg, Pa.

Majestic

Delegates from Grigsby-Grunow Co., Chicago, were: Don Compton, vice president and general manager; V. W. Collamore, general sales manager; Robert Brunhouse, refrigeration sales manager; Lance Underhill, refrigeration sales department; F. J. Corneil, factory engineer; Ray Erlandson, educational director; J. E. McDonnell, factory representative, Newark.

Miss Edith C. Ault, home economics director, Philadelphia; A. E. O'Brien, sales department, Peirce-Phelps Co., Philadelphia; H. Hilduser, factory district manager, Philadelphia; Howard M. Threlkeld, field engineer, Los Angeles; W. L. Sayre, district manager, upper New York, Syracuse; Charles W. Boegel, Jr., sales representative, Majestic Distributing Corp., Cleveland.

Servel

The following represented Servel Corp., Evansville, Ind.: Col. Frank Smith, president; V. E. Vining, sales manager; Roderick Peters, assistant sales manager in charge of government sales; Paul Jones, advertising and sales promotion manager; Carl Conkey, commercial sales manager; R. B. Andersen, sales promotion.

R. M. Billhimer, southern division manager; Jack Carter, New England division manager; W. A. Mahoney, commercial sales representative; S. R. Cooper, educational supervisor; Ted Williams, district sales manager, northeastern division; Joe Cannon, New England district sales manager; Ray Waldron, New England district sales manager.

Westinghouse

Carl D. Taylor, assistant sales mgr., Mansfield, Ohio; R. S. Tritle, vice president and general manager, East Pittsburgh, Pa.; Marshall Adams; A. A. Brown, New York; J. K. B. Hare, New York City; Henry D. Shute, East Pittsburgh, Pa.; J. M. Barnett; E. S. Barrington, Philadelphia, Pa.; J. V. Breisky, East Pittsburgh, Pa.; R. C. Cosgrove, Ralph W. Krass, New York City; M. C. Morrow, merchandising manager, Pittsburgh, Pa.; M. E. Reagon, Pittsburgh, Pa.

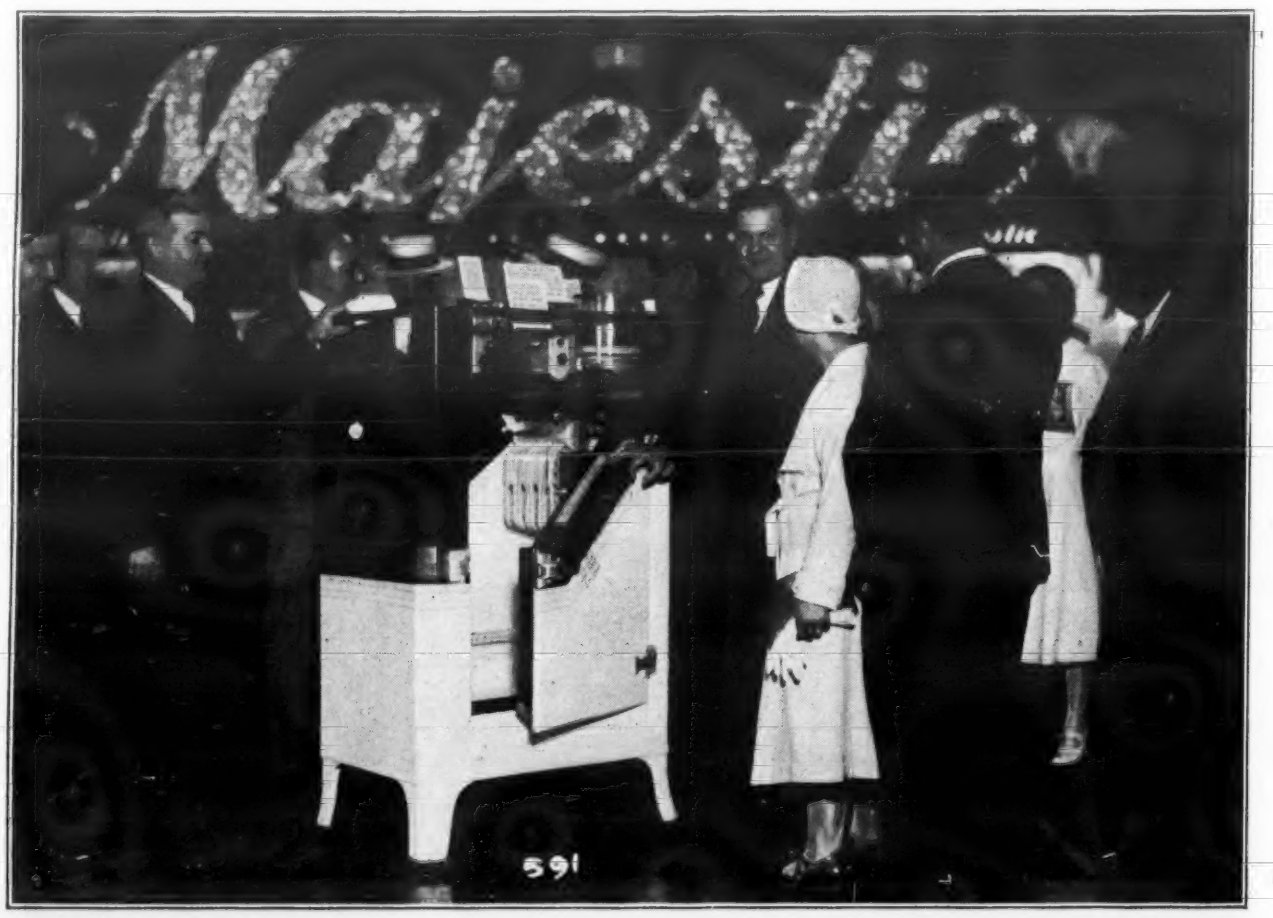
G. H. Cox, Philadelphia, Pa.; F. C. Hanker, East Pittsburgh, Pa.; Charles M. Kirkpatrick, New York City; H. J. Lingal, East Pittsburgh, Pa.; Alice L. McCarran; Herbert May, Pittsburgh, Pa.; C. M. Moss, Cleveland, Ohio; R. A. Neal, East Pittsburgh, Pa.; N. G. Symonds, commercial vice president, Chicago.

C. E. Allen, commercial vice president in charge of merchandising, East Pittsburgh, Pa.; C. A. Powel, East Pittsburgh, Pa.; Elmo B. Roper, Jr., New York City; Harold W. Smith, East Pittsburgh, Pa.; H. D. Stephens, New York City; A. C. Streamer, East Pittsburgh, Pa.; B. T. Tremaine, Buffalo, N. Y.; R. E. Imhoff; Charles A. Meier, St. Louis Mo.; Frank L. Nason, Boston, Mass.; J. T Peyton, Philadelphia, Pa.; H. M. Gansman, Philadelphia, Pa.; W. B. Henri, Chicago, Ill.; H. A. D'Arcy, public utilities representative, Mansfield, Ohio; K. K. Gordon, service supervisor, Mansfield, Ohio; B. F. Moody, field representative, Mansfield, Ohio.

R. R. Kime, New York City; H. I. McConne, Philadelphia, Pa.; John F. Myers, Washington, D. C.; T. J. Pace, East Pittsburgh, Pa.; A. W. Robertson, New York City; Charles H. Smith, East Pittsburgh, Pa.; B. W. Clark, New York City; George O. Lien, Newark, N. J.; H. E. Miller, Newark, N. J.

John Andrews, Jr.; Pittsburgh, Pa.; W. S. Rugg, East Pittsburgh, Pa.; A. R. Rutter, Newark, N. J.; H. S. Warford, Philadelphia, Pa.; R. J. Wensley, East Pittsburgh, Pa.; Nat Elin, distributor, Newark, N. J.; I. J. Zorn, Philadelphia, Pa.

Majestic Makes Bid for Public Utility Business



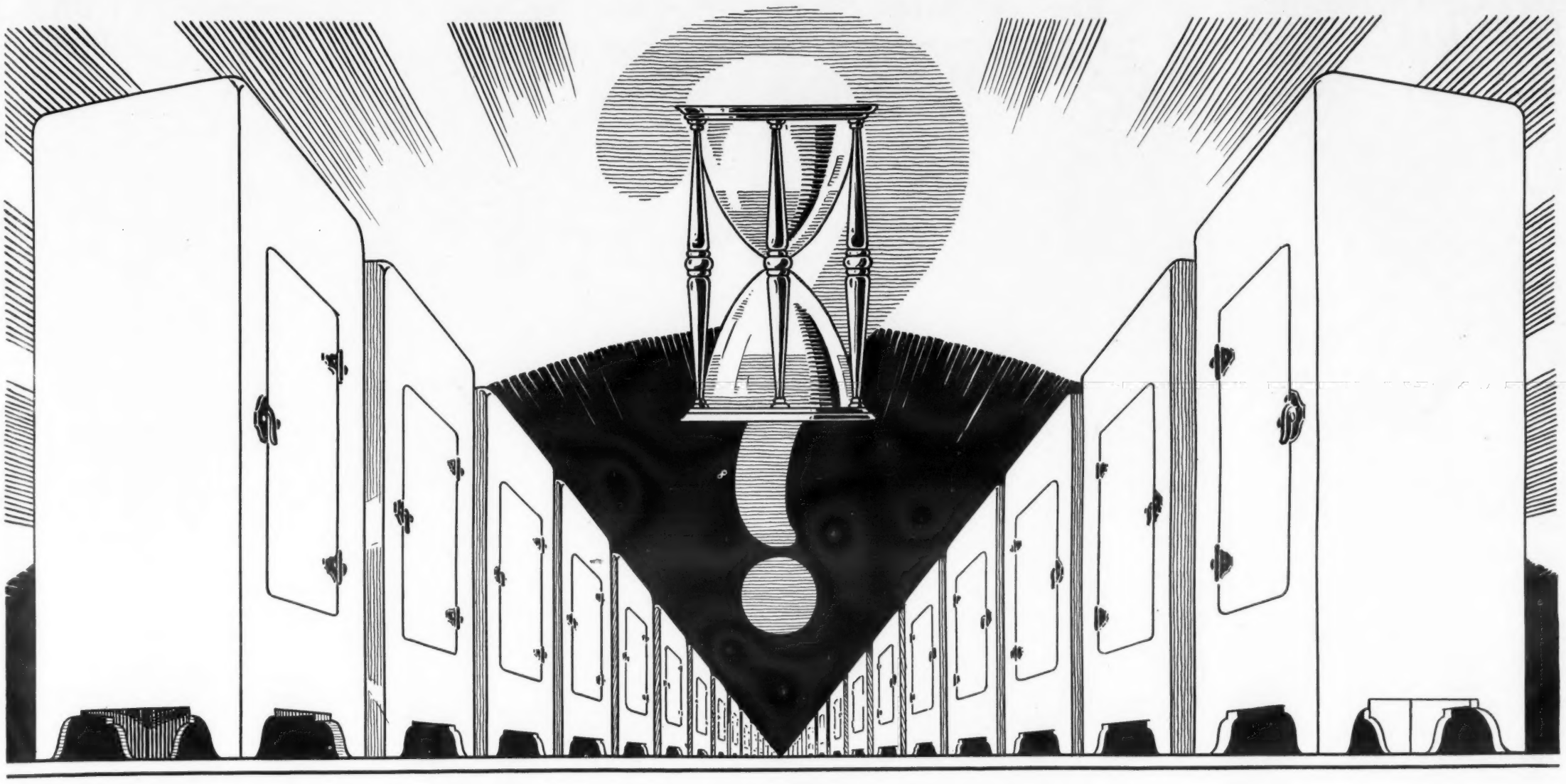
Majestic's first N. E. L. A. exhibit featured the above cutaway model. Attendants explained that three inches of Dry-Zero insulation is used in the cabinets, and that the exterior finish includes an Oakite process, Bonderizing, a brine coat, and four coats of white pyroxylin lacquer.

N.E.M.A. TO COMPILE FIGURES BY MONTHS

(*Concluded from Page 1, Column 1*)

Mr. Ruthenburg states. This method is being given a trial operation by several members of the division. Specific recommendations on the method will probably be made by the technical committee of the division within the next 60 days.

Col. Frank E. Smith, president of Servel, Inc., and chairman of the commercial practices committee, will likely present specific proposals on a recommended uniform warranty at the next division meeting, according to Mr. Ruthenburg's report. Howard E. Blood, president of the Norge Corp., has been appointed to membership on the commercial practices committee.



Follow Your Cabinet—

On down the Corridors of Time

When another decade has rolled around . . . when year after year has added its punishment of time and service . . . when tiny tots have attained full stature and new homes need new equipment, what about the cabinet that bears your 1931 name plate?

Will it have stood the pace? Will the years have dealt with it kindly? Will all the hopes have been fulfilled that held high on the day of its shipment?

Those refrigerator manufacturers who are foresighted in their choice of Dry-Zero Pliable Slab insulation TODAY, can look down the corridors of time and be assured of the same high efficiency as year after year rolls by.

Impartial authorities say Dry-Zero is the most efficient commercial insulant known. That efficiency is permanent for Dry-Zero will not settle, crack or disintergrate, it has a unique aversion to moisture, it can never develop or absorb odors.

Dry-Zero is an ally that will help to make your business permanent by helping to give permanent satisfaction to your product.

DRY-ZERO CORPORATION
Merchandise Mart - Chicago, Illinois
Canadian Office - 465 Parliament Street, Toronto

DRY·ZERO
THE MOST EFFICIENT COMMERCIAL INSULANT KNOWN

REFRIGERATION DRIVE IS WELL ORGANIZED, SAYS BUREAU CHIEF

By J. E. Davidson*

OUR NATIONAL cooperative activity, launched originally to sell only electric refrigerators and to build greater load, has became a four-pointed star:

1. Making electricity of greater service to the home.
2. Improving our trade relations.
3. Stabilizing production for the manufacturers of electric refrigerators.
4. Building greater load for the light and power companies.

The plan for this nation-wide activity had its inception just about a year ago. During the summer the plan took definite shape and in the late fall of 1930 was approved by this association.

At the outset several conferences were held, with the result that the officers of the Frigidaire, Kelvinator, General Electric and Westinghouse companies made the generous committment of $1,000,000 to care for the national expense of a three-year program, with the immediate aim of selling 1,000,000 refrigerators in 1931.

Every State Covered

Also, there was established at N. E. L. A. headquarters an Electric Refrigeration Bureau, with a full time director. Commercial Director Greenwood and his office have devoted the major portion of their time during the past few months to this activity. Field men were sent out, so that every state in the Union has been contacted, either by Mr. Greenwood, Dr. Allison, the field men or myself.

It was natural to follow that in formulating plans calling for a cooperative selling movement on the part of keen competitors, there would be many obstacles to overcome. Other selling agencies were invited to participate, and we now have, besides the electric light and power companies and the refrigerator distributors and dealers; the hardware, furniture, department and other stores selling electric refrigerators, taking part in this activity.

Following the offer of the refrigerator manufacturers, an executive committee was organized, composed of representatives of the refrigerator manufacturers and the electrical industry, together with staff officers from N. E. L. A. headquarters.

The next step was the organization of a planning committee. We were very fortunate in having as members of our planning committee interested and alert advertising and selling executives of the manufacturers and electric companies. This committee worked over a period of six months, preparing the national and local plans.

Our cooperative activity was divided into three selling groups—Spring, Fall and Christmas. Special advertising and sales promotional materials have been prepared to conform with these selling seasons.

Thirteen Regional Directors

Our field organization began with the appointment of regional directors for each of the 13 N. E. L. A. geographic divisions.

If the United States Post Office were privately owned I am sure it would pay increased dividends to its stockholders for this year, judging from the thousands of letters I have written and the mail I have received. I have written one or more letter to practically every electric utility executive and to the officers of the refrigeration companies, encouraging them to take part in this activity, or furnishing information.

But even though this letter-writing has been quite a chore, I have been well repaid by the encouraging reports and offers of assistance. The executives have united behind this activity practically 100 per cent.

The completeness of our organization is best illustrated by the fact that an electric refrigeration activity is now being conducted in practically every community of every state, and also by our Canadian neighbors and far-off Hawaii.

The plans call for the expenditure locally of 10 cents per domestic meter, which equals approximately $2.00 per refrigerator of expected sales. Local Electric Refrigeration Bureaus in just 13 cities have definitely appropriated for purposes of their local organizations an amount in excess of the total commitment by the refrigerator manufacturers to support the national bureau for the first year of the three-year activity. It is interesting to add that New York, Chicago and other large cities that are spending liberally are not included in this list.

Further plans to include at least one or more cooperative electric shows or exhibits were made. Reports came to us of such shows held in many of the larger cities and smaller towns. In each instance it was evident that the electric show aroused keen interest, the attendance was beyond expectation, and it was instrumental in increasing refrigerator sales.

In connection with shows to be held this fall, the commercial national section is just about to issue a special detailed booklet entitled "Cooperative Electric Refrigeration Exhibits." This booklet gives complete information, from the putting up of booths to publicity and advertising in connection with such cooperative electric show or exhibit.

In order to provide experienced and expert advertising counsel for the planning committee, the Lord & Thomas & Logan advertising agency was retained.

This agency immediately made a field survey in order to ascertain the information necessary to determine the nature and form of the advertising and sales promotion which is now playing an important part in this campaign.

Guided by these facts, the planning committee, joined by the advertising agency, prepared national magazine advertisements, local newspaper advertisements, sales promotion aids, and a prospectus of the general plan. Within the brief period of 30 days the prospectus was completed and 3,000 copies distributed to those interested.

Shortly afterward a complete plan book was created and was ready for the printer, to be distributed shortly after January 1. Just at that time it became evident that the activities of the Electric Refrigeration Bureau, including our slogan to be used in this plan book, had run counter to certain opinions held by the ice companies.

A parley was held with representatives of the ice industry, and the printing of the plan book and the other promotional activities were suspended temporarily.

As a result of this parley our original slogan was changed to read—"Invest In An Electric Refrigerator." Changes were also made in the wording of our national advertisements, local newspaper advertisements, and sales promotional material.

With these concessions oil was poured upon the troubled waters and the board of directors of the National Association of Ice Industries passed a formal resolution, expressing their appreciation of our cooperation.

Because of this delay, distribution of the plan book was not started until February, when more than 25,000 copies were distributed. In addition, a monthly newspaper "The Electric Refrigerator Cooperator" made its bow with the March issue.

On March 28 the *Saturday Evening Post* and *Good Housekeeping* fired the first gun in the national advertising and publicity campaign. A full page appeared in *Good Housekeeping*, and a double-page spread over the name of the Electric Refrigeration Bureau appeared in the *Saturday Evening Post*, in a section with eight additional pages of advertising by the leading refrigerator manufacturers. Over four and one half million readers of these publications had electric refrigeration forcefully called to their attention.

Once the activity got under way, the momentum increased as the advertising messages spread. Our cooperative selling activity is now being carried on in more than 8,500 cities, towns and communities, with a total sale since January 1 of more than 500,000 refrigerators.

Million Lines of Advertising

Judging from the number of newspaper mats and electros already purchased from our national bureau, more than a million lines of local advertising will appear this year in newspapers, heralding the cooperative message of electric refrigeration.

Besides, even a greater amount than this of regular newspaper advertising will appear in stimulating the sale of individual refrigerators.

When we conducted the Better Home Lighting Campaign in 1924, at which time it fell upon me to be chairman, I thought we had done an unusual organization job when 4,700 cities and towns took part in that program.

However, the summary of progress of the refrigeration bureau up to date shows that there are nearly twice as many cities, towns and communities now carrying out our plan of cooperative selling with the dealers of electric refrigeration.

A prominent executive of our industry stated that if the Electric Refrigeration Bureau had been launched a year sooner, there would have been no anti-merchandising bills introduced in the state legislatures. From my own observations and experiences, I am convinced that he was right.

Without question the electric refrigeration selling activity offers a concrete, immediately available vehicle for solving trade differences as between utility companies and other merchandisers, and the substitution for these differences of a concerted sales program in which everyone taking part can reap benefits.

Let me say again that if this activity does nothing more than stimulate greater cooperation among the electric light and power companies and the rest of the agencies selling electrical appliances, it will be worth the time, energy and money expended in its development.

Even so from the material side, also, this activity is well worth while. I am confident we will reach our goal of 1,000,000 refrigerators, and this will bring approximately $30,000,000 in additional revenue annually to our companies.

This is a timely business, because without increased property investment and with but little increase in operating expenses, it will bring this increased revenue, needed now in off-setting some of the losses of electric energy consumption as a result of curtailment of factory production.

Profitable Investment

When our quota of 1,000,000 refrigerators is reached which is 5 per cent of the residential meters of the United States, we will bring in this amount of increased revenue at a cost for this activity of approximately 10 cents per residential meter, or $2.00 per refrigerator sold. Is there any other way in which our industry can more profitably invest its energy and its money?

Do you realize that 87 per cent of our customers are potential prospects for electric refrigeration? You can see that the potential market for home use of electric refrigeration has scarcely been opened, and presents an enormous immediate possibility to electric utility companies and electric refrigeration manufacturers and dealers for greater business.

The important part that is being played in electric refrigeration in our industry is well demonstrated by a few figures. Prior to 1931 there were approximately 2,319,000 domestic refrigerators on our lines. Those bring in an annual gross revenue to our electric companies of approximately $69,000,000. If we are successful in adding 1,000,000 refrigerators, by the end of this year the revenue from electric refrigerators on our lines will amount to nearly $100,000,000, the largest item of domestic appliance revenue.

*Address by J. E. Davidson, president of the Nebraska Power Co., and chairman of the Refrigeration Bureau, before the second general session of the N. E. L. A. convention, Atlantic City.

The Campaign Slogan Travels on Wheels

Chairman Davidson inspecting one of the many tire covers bearing the campaign slogan.

"Electricity Solved Farm Refrigeration Problem," Declares Gus Dyer

ATLANTIC CITY—"Electricity has solved the farm refrigeration problem," Gus W. Dyer, editor of the *Southern Agriculturalist*, told the first general session of the N. E. L. A. convention Tuesday morning, June 9.

"Before the advent of electric refrigeration," he said, "the farmer found ice difficult to get, and would melt before you got it home. Now rural dwellers have just as good refrigeration as men and women in New York City."

According to speaker Dyer, the concern which makes the most profits almost always gives the best service, and it is able to give good service because it makes good profits. Moreover, it makes the most profits because it gives the best service.

"The electrical industry has given remarkably good service, and has profited thereby," he declared. "Electricity is initiating a new industrial revolution This revolution will bring about the decentralization of industry and population, in contrast to the industrial revolution wrought by steam, which effected centralization and caused crowded cities.

"Whereas the accumulation of wealth is a mental process, most men think it is a physical process," he said. "Thus when somebody accumulates a lot of money by sheer brain-power, the general public is likely to think that the wealthy man got his money by crookedness.

"Unable to understand how anyone can think his way to fortune, the less intelligent men seek to take away the smart man's money by legislation.

"Business is coming back, but not where you're looking for it."

WESTINGHOUSE CHANGES CLEVELAND PERSONNEL

CLEVELAND—J. Morris Ireland, for five years manager of the Cleveland Westinghouse office has been appointed special representative of the company, according to J. Andrews, Jr., central district manager.

F. G. Hickling who goes to Cleveland from Pittsburgh will succeed Mr. Ireland.

NAMED NEVADA DISTRIBUTOR

LAS VEGAS, Nev.—H. E. Saviers & Sons., Inc., was recently appointed a General Electric dealer. Since signing the contract the company has sold 32 refrigerators.

WINNERS OF PRIZE AWARDS ANNOUNCED AT ATLANTIC CITY

ATLANTIC CITY—Winners of eight annual prize awards were announced at the fourth general session of the N. E. L. A. convention, Friday morning, June 12.

The H. M. Byllesby prizes, three cash awards, $250, $150, and $100, for papers on increasing the usefulness of the accountant in the utility business, were awarded to H. D. Anderson of the American Gas & Electric Co., New York City; Carl G. Willard of the Carolina Power and Light Co., Raleigh, N. C., and George Borke of the Syracuse Lighting Co., Syracuse, N. Y., respectively.

Three cash awards, the James E. Davidson prizes, were won by L. G. Cannon of the Commonwealth Edison Co., Chicago (first prize); H. M. Stark of the Electric Bond and Share Co., Buenos Aires (second prize); and D. F. Conger of the New York Power and Light Co., New York City, for papers dealing with commercial or merchandising problems.

The Augustus D. Curtis award of a certificate, carrying a cash award for the greatest contribution to commercial electric lighting, were won by the New Orleans Public Service Co., New Orleans, with M. F. Canning winning the cash prize of $500.

A. F. Tegen of the Milwaukee Electric Railway & Light Co., Milwaukee, was the winner of the Henry L. Doherty medal for the best paper on any subject relating to the electric light and power industry.

The B. C. Forbes public service cup for the most constructive public relations campaign was awarded to the Virginia Public Service Co.

The James M. Gilchrist medal, carrying a $1,000 cash award, for the best contribution on electrical advertising, went to the Indianapolis Power & Light Co., Indianapolis, with Harry Brunnell receiving the cash prize.

Daniel Ravenel, Jr., of the South Carolina Power Co., Charleston, won the Martin J. Insull cash prize for the best paper on public relations.

The James H. McGraw prizes, three awards of $250, $150, and $100, for papers on engineering and technical subjects, were won by G. B. Underhill of the Central Hudson Gas and Electric Corp.; Maurice J. Kelly of the Shawinigan Water and Power Co.; and A. Hoefle of the Toledo Edison Co., respectively.

SWOPE RECOMMENDS COOPERATIVE ACTION

ATLANTIC CITY, N. J.—Cooperation between an industry and its employees to the end that employment will be regularized as a process which will make unemployment insurance unnecessary was urged by Gerard Swope of New York City, president of the General Electric Co., at the third general session of the National Electric Light Association convention, Thursday morning.

He recommended "joint undertakings between the company and the employees" and said that group life insurance and old age pensions, in their inception, were started by industries without contribution from the employees, largely with the motive of reducing turnover and in this way reducing costs.

"The employees, of course, accepted these things without questioning," he said, "because they were something given to them and involved no responsibility on their part. They may have said 'thank you' but had no real interest in them, and these could not and did not take the place of adequate compensation.

"Therefore, as a result of experience, it seems to me the best basis for a study of these broad questions, is, first, joint consideration by employees and the company, second, joint contributions, and, third, joint participation in the administration of the plan."

He called upon the public utilities to take the lead in this movement, saying: "A solution of such problems may make an even greater contribution than any the National Electric Light Association has made in the past and it may be the light to lead us out of this fearful morass in which we find ourselves.

"The public utilities have always had the vision to see the future and the courage to embark on uncharted seas. I have great faith that if this seems worthy of your study your solution of this problem will be of great benefit, not only to the public utility industry, but to all industries, both here and abroad."

TODD JOINS SYRACUSE CO.

SYRACUSE, N. Y.—G. H. Todd has been named manager of the electric refrigeration department of E. W. Edwards & Son, department store here, by B. A. Kelly, manager of the electric appliance division of that company.

Mr. Todd has been connected with the electric refrigeration industry for the past six years and started in as a retail salesman.

Why try to COMPETE when you can SELL Kelvinator ?

UNQUESTIONABLY, it is easier to sell Kelvinators than to sell against them. And this will become more and more evident as time goes on and the public learns what really constitutes *value* in an electric refrigerator.

Consequently, the Kelvinator franchise is an opportunity that will *grow*, instead of diminishing—an investment upon which you can show an *increasing return*, year after year.

Send the coupon below and get the facts. Why try to sell against —when you CAN SELL KELVINATOR?

KELVINATOR CORPORATION
14245 Plymouth Road, Detroit, Michigan
Kelvinator of Canada, Ltd., London, Ontario
Kelvinator Limited, London, England

(323)

C O U P O N

Kelvinator Corporation, 14245 Plymouth Road, Detroit, Michigan

Gentlemen: Please send your representative to discuss the Kelvinator Sales Agreement.

*Name*_____

*Street Address*_____

*City*_____ *State*_____

MERCHANDISING SECTION
ELECTRIC REFRIGERATION NEWS
The Business Newspaper of the Refrigeration Industry
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Million in 1931?

ACCORDING to James E. Davidson, chairman of the executive committee of the Electric Refrigeration Bureau, estimates received from several manufacturers indicate that more than 325,000 refrigerators were sold during the first four months of 1931, and that probably 75,000 more were purchased during May. Only two geographic divisions of the bureau—the Rocky Mountain division, with 106 per cent, and the Middle West division, with 136 per cent—have reached their first quarter quota. Sales for the nation as a whole, Mr. Davidson reports, stand at 81.5 per cent of the quota to date.

This report will likely add a great many voices to those which have already been asking: "Will sales of electric refrigerators reach the million mark this year?"

The answer will likely depend upon the amount of business which the industry does during the second half of the year. Executives point out that refrigeration sales got off to a slow start because of the late spring and because the public utility campaigns began later than usual this season. Hence they expect the peak selling season to extend farther into the summer than has been true in the past. The latter part of the year, however, still remains a problem.

Fall, Winter Sales

Fall and winter sales, and what to do about them, have caused considerable discussion in the past. This year the entire industry needs to concentrate upon a genuine selling effort during the late months in order to achieve the quota of one million electric refrigerators.

Carl Taylor of Westinghouse has suggested increased advertising and higher commissions for salesmen during the fall and winter months as steps which may help lengthen the selling season. Various applications of these ideas may be considered by other refrigeration executives in planning their fall sales activities.

In September the Electric Refrigeration Bureau of the N. E. L. A. will come to the front with a promotion program, and still another drive is planned by this body for Christmas. The success of these Bureau activities will depend largely upon the cooperation which they receive from dealers, and upon the ability of the Bureau to tie up its national program with a great number of vigorous local sales efforts.

Progress or Neglect?

It may be found that the slow resumption of normal business activities, the gradual return of public confidence and the loosening of the national purse-strings, will provide a ready market for an article which now enjoys a considerable degree of public acceptance. On the other hand, the industry may discover that the general household appliance dealers which it has so assiduously cultivated during recent months will temporarily forget refrigeration and turn their attention to radios and oil burners, which have their peak months in the fall.

In any event, the problem deserves the serious attention of the best minds in the industry. The second half of the year has long been recognized as a major obstacle in the path of satisfactory sales volumes for electric refrigerators. Inasmuch as the industry has established a definite goal of one million units for 1931, this is the year that a real attempt should be made to hurdle the obstruction of limited cold weather demand.

Utilities Want Statistics

WHEN the Electric Refrigeration Bureau met in Atlantic City last week in connection with the N. E. L. A. convention there, one salient demand was made by almost every division leader who reported. Statistics on sales of electric refrigerators were not available, and these men wanted them. They were conducting a cooperative campaign to sell one million electric refrigerators, yet they had no figures by which they could judge the progress they were making.

The demand is apparently prevalent all over the land. Specific mention of the lack of statistics as the big missing link in the program was made by these influential men from utilities scattered across the continent: C. L. Edgar of the Edison Electric Illuminating Co., Boston; C. L. Law of the New York Edison Co., New York City; C. E. Michel of the Union Light and Power Co., St. Louis; H. L. Pinkerton of the Albuquerque Gas and Electric Co., Albuquerque, N. M.; and J. E. Davidson of the Nebraska Power Co., Omaha.

Mr. Davidson, who is chairman of the executive committee of the Electric Refrigeration Bureau, crystallized the sentiment of the central station executives present at the meeting by stating that complete figures on this campaign would be needed in order to sell the utilities on a similar campaign next year. The concensus of opinion was that working in the dark is as deplorable as working without an objective.

Promote Stability

For several years ELECTRIC REFRIGERATION NEWS has been counselling the periodical collection and publication of accurate industry statistics on sales, production, and inventories. It has been the conviction of the NEWS that the industry's best interests will be served by the adoption of a policy of publicity which will reflect the industry's true growth and promote its business stability.

It has been pointed out that the investing public is accustomed to having regular and accurate reports revealing current conditions in terms of factory output. Secrecy will not beget confidence among intelligent investors. Now it becomes apparent that secrecy will not help the industry retain the confidence of the public utilities.

The recent action of the NEMA refrigeration division in agreeing upon a plan for the collection of national figures on production, field and factory stocks is encouraging. Utility executives engaged in the present campaign, however, are demanding that these figures be broken down by states, and even by cities.

Many-Sided Demand

Agreement is becoming general that exaggeration will do the industry no good, and that the period of optimistic ignorance is over. The industry itself needs accurate statistics in order to furnish executives with a basis for gauging the rate of present development, for estimating future growth, and for protection against the possibilities of over-expansion. Bankers and investors want statistics to lay out their money intelligently and with confidence. Distributing organizations seek statistics so that they may estimate the possibilities of electric refrigeration from a consumer-sales viewpoint. Refrigeration sales organizations ask for figures to help them establish quotas. And now the public utilities are chorusing a demand for complete statistics in order that they can take stock of the progress of their cooperative campaigns, and make plans for similar drives in coming years.

From all sides comes the request for accurate figures on the electric refrigeration industry. The industry appears to be in sound condition, everybody is reporting new sales records, and the time for the collection of complete statistics seems to have arrived.

"My word! No cellophane?"

From The New Yorker.

Utility Executives See Big Possibilities In Developement of Domestic Field

ATLANTIC CITY, N. J.—Samuel Ferguson, president of the Hartford Electric Light Co., Hartford, Conn., in an address before the commercial national section of the N. E. L. A. Wednesday afternoon, insisted that the light and power industry must adopt the so-called "two-part or promotional rate" for domestic power.

"What I wish to emphasize today," he said, "is the fact that you have not yet sold to the executives of our companies the realization of the good business which is waiting in the heavy duty household field and how far we are justified in going in the matter of expense and rates to obtain its benefits.

"The possibilities of this splendid field must be demonstrated before you will be given the full executive backing which is essential to progress.

"The fact is not yet realized that the domestic business, instead of having the poorest load factor of any class, is capable of being developed to be the very best, excepting only street lighting and the occasional 24-hour industrials," he said, in conclusion.

Real Issues Become Submerged

Ridiculing the idea that public relations is a "great complex problem" or that it requires some type of "superspecialist who as yet has not appeared on the horizon," Horace P. Liversidge, vice president of the Philadelphia Electric Co., said that "where large combinations of human interests are concerned, real issues become submerged in a mass of insignificant details."

Urging the importance of customer contacts he added: "From a practical business standpoint it is far easier and less costly to sell a satisfied customer; therefore, the mental attitude of the public and its opinion of the utility must be a most important consideration in our future program of increased sales. From the time the contract for service is signed, our selling begins in earnest.

"We must not only live close enough to the customer and serve him as he expects to be served, but we must develop and maintain a personal contact that will permit him, when he thinks of the utility in relation to his individual requirements, to picture us, not as a single corporation, but rather as a group of individuals, each one striving to do his part in the service to the public. He should think of the company in terms of that personal confidence which he has gained through the contact with our representatives."

Samuels Reports on Power Study

Reporting on the work of the Commercial and Industrial Power and Heating Bureau, W. H. Samuels, of the Commonwealth & Southern Corp., New York, told the meeting that "an unfortunate coincidence of the business depression is that industrial plants are watching their costs closer than ever and the power and industrial heating sales engineers are consequently spending much of their time keeping in touch with existing customers and watching out for their welfare."

He recommended to light and power engineers the sentiment expressed by H. L. Phillips, columnist of the *New York Sun*, which hears: "I believe in the ability, instinct, capacity and power of the average American to fight his way out of any difficulty, to scale any reasonable heights, to make the final payments on the automobile, to put something in the bank and to look adversity in the face."

J. H. Van Aernam of the New York Power & Light Corp., Albany, N, Y., said that "more domestic kilowatt hours" is the battle cry of the industry today.

"Irrespective of the diversified ways we may plan to get our foot in the door to tell our persuasive story," he said, "only three homes are open to us—the home already wired, the unwired old home, and the new residence."

He pointed out that electric utilities can be of great help to the public by offering their expert advice on lighting, wiring and like matters, instead of to the "distorted tastes and false wiring notions of an uninformed public."

T. O. Kennedy, vice president and general manager of the Ohio Public Service Co., and chairman of the section, presided.

Kind Words Dept.

Hagerstown, Md.

Editor:

I am a steady reader of your periodical and find it very instructive and informative. The fact is, I like it better than any refrigeration journal published.

O. A. MORGNER,
Sales Promotion Mgr.
Victor Products Corp.

Harrisonburg, Va.

Editor:

"Enclosed please find $2 to renew my subscription for one year to ELECTRIC REFRIGERATION NEWS. I feel that it would be a great loss to do without it, as it is the only way I have to keep in touch with the refrigeration industry as a whole."

HOWARD E. MASON,
People's Hardware Co.

More News About

I would like to see more news about:

Methods of selling refrigerators.—Peterson Battery & Tire Co., Detroit Lakes, Minn.

Allied lines.—E. H. Brady, Hot Springs, Ark.

Cold storage work, if convenient. Cold storage of fruit.—Chris Augsburger, Adams Co., Pa.

Grigsby-Grunow, also the Grunow group.—Joseph W. Heckert, Hegins, Pa.

Majestic.—Badin Radio Shop, Badin, S. C.

Majestic.—Edw. W. Russell, Toms River, N. J.

Majestic.—Perrin's, Lodi, Calif.

Frigidaire.—Harry M. Wilson, Philadelphia, Pa.

Copeland.—H. P. Scott, Gardiner, Me.

G. E. dealer. Paper O. K.—Edw. H. Brozka, Wellsburg, W. Va.

Coming Events

Association of Iron & Steel Electrical Engineers, annual meeting, June 15 to 19, Cleveland. J. F. Kelly, 1007 Empire Bldg., Pittsburgh.

Canadian Electrical Association, annual meeting, June 16 to 18, Banff, Canada. H. W. Lyster, Power Bldg., Montreal, Que.

American Society of Agricultural Engineers, annual meeting, June 22 to 25, Ames, Iowa. Raymond Olney, St. Joseph, Mo.

American Institute of Electrical Engineers, summer convention, June 22 to 26, Asheville, N. C. F. L. Hutchinson, 33 W. 39th St., New York City.

American Society for Testing Materials, annual meeting, June 22 to 26, The Stevens Hotel, Chicago. C. L. Warwick, Engineers' Club Bldg., 1315 Spruce St., Philadelphia.

Camp Cooperation XI, July 27 to 31, Association Island, Henderson Harbor, N. Y. Society for Electrical Development, 420 Lexington Ave., New York City.

'TAKE LEADERSHIP IN BUSINESS' -- JONES

ATLANTIC CITY—"Our industry has been able to go through one of the most serious business depressions the world has ever seen without serious impairment of its financial structure, or great diminution of its productive earning power," said W. Alton Jones of New York City, president of the N. E. L. A., and first vice president of Henry L. Doherty and Co., opening the 54th convention of the association Tuesday morning, June 9.

"It is both interesting and gratifying to us and to other investors in the electric light and power business," he said, "that our industry has stood out in striking contrast to almost every other line of business. It has been least affected."

Comparing the reports of more than 600 corporations for the first three months of 1930 and 1931, Mr. Jones pointed out that, while the earnings of 259 industrial corporations, taken as a whole, were 54.8 per cent under those of the previous year, and 171 railroads showed a decrease of 39.3 per cent, 76 light, power and gas companies showed a decrease of only 1.6 per cent.

Duplication of Investment

Discussing the question of over-production, Mr. Jones blamed it on "the duplication of investment, or an excessive investment in the property used and useful in the production of a commodity or service" He ascribed the situation in the light and power industry as being due to the careful control and direction of the capital investment along sound economic lines—regional grouping under one management of service facilities and equipment, to the end that greater economies might be effected and greater utilization made of the investment already in the business; interconnection of independently owned power transmission lines; research and development work; perfection of both production and utilization equipment; and great commercial effort for new and better business and a further diversity of income.

Criticising so-called "promotional rates" as being "unsound and dangerous," he warned the industry against the class of customers known as "convenience users," saying: "From the best information available it appears we now serve some 6,000,000 domestic consumers at a loss, and that this loss is levied against other users of service who are compelled to pay a higher rate than they should over and over again in the promulgation of rate schedules. light and power companies and regulatory bodies have failed or refused to recognize the fact that we are dealing in a service and not a commodity, and have designed rate forms accordingly."

Emphasizing the fact that light and power rates have steadily declined during the past 30 years, Mr. Jones said: "An examination of the record shows that the amount of electricity used by domestic consumers in 1930 would have cost $150,000,000 more in 1920, $300,000,000 more in 1910, $800,000,000 more in 1900, and $1,250,000,000 more in 1890.

"While the domestic consumption has increased more than 60 times in the past 40 years, the total domestic bill of the nation has increased less than 20 times.'

Ridiculing the contention that the bill "of less than 10 cents a day for the average American home is exhorbitant and amounts to extortion," Mr. Jones said: "I firmly believe that the predatory politician who makes such contentions is insulting the intelligence of the average American citizen.

"I believe the average citizen is intelligent enough to see the great difference between the low cost of electricity and the high cost of politics. It is no longer a secret that the cost of our political institutions has become one of the greatest burdens which our people have to bear.

"The tax-gatherers of this country are now taking a toll of over $12,000,000,000 per year from the pockets of the people of this country. This represents 20 times as much as the domestic consumers now pay for electric service.

One-Third of Income for Taxes

"This industry alone pays in direct taxes, approximately $200,000,000 a year, which represents 10 cents out of every dollar collected in gross revenues, and almost one-third of all moneys collected for domestic electricity.

"It would be inconvenient for anyone to dispense with the use of electric service, but it is entirely possible to do so. On the other hand it is impossible to avoid the tax collector. We must all share the cost of government, and in the now staggering tax bill we pay for the most glaring political inefficiency."

Turning to the political attacks which are being made on the light and power industry, Mr. Jones designated them as being "a rehash of old drivel and political buncombe."

"The total number of 'power trust' agitators is not large," he stated. "In normal times their preachments would attract no considerable following among thinking Americans. We find, however, that in a period such as the one through which we are now passing, many people are looking for quick remedies for their business or personal ills, and are prone to turn to the demagogue for relief.

"Fortunately, the record of our industry is such that it is difficult for even a clever politician, skilled in trickery, to make a case against us, if we but present the evidence to the public. We cannot afford, however, to remain silent in the face of false charges and unwarranted attacks.

"I therefore strongly urge that the leaders of this business aggressively follow up the matter of answering such attacks through public statements, and paid advertisements if necessary.

"In my opinion the management of light and power companies would be neglecting their obligation to their stockholders and the public, if they fail to challenge openly such unwarranted attacks. Certainly we are obligated, and our investors expect us to defend their property against the muckracker who is a parasite in every democratic government.

"If evils exist, we should correct them from within. No industry can be 100 per cent pure. Here and there we have seen mistakes and mismanagement in the light and power business. But, taken as a whole, no industry in America has done more than ours to merit the confidence of the people of this country."

In conclusion, Mr. Jones declared: "Business has duffered a shock to its nervous system due to the violation of some basic laws which govern world commerce. I am satisfied, however, that the greatest suffering in recent months may be traced to fear and timidity upon the part of normal people, who, if they but reflect, will recall innumerable times in the history of this country when we faced much darker days and more serious troubles.

"Many are crying out now for a new leadership in business. To me this seems to be a futile cry, for leaders are not made over night. And while periods of this kind develop the stuff out of which men are made, we must look to those men who have piloted our industries through other storms to make the port in this gale.

"No group of men is better qualified to play an important role and help lead business back to safe ground than those who have proved themselves leaders in the light and power business.

"Let us therefore dedicate ourselves to this task. Let us administer the elixir of sanity in large doses, and, in the thousands of communities in which we serve, help to do those things which will extricate business from the doldrums. If we do this we shall share in the certain prosperity which will follow. If we fail, our business which has, thus far, been affected so slightly, will feel the chill of the blast of the business winter."

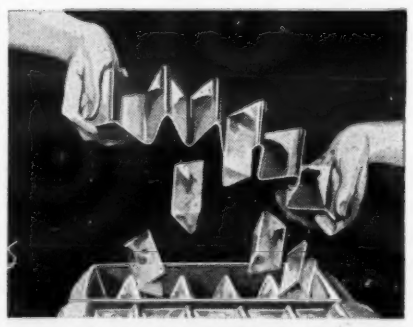
Easy-Out TWIN ICE TRAY

MAKES ICE BARS . . . . .Not Cubes
OUT IN A JIFFY without holding under water
20% TO 50% FASTER FREEZING . . .

FOR ALL POPULAR REFRIGERATORS

FITS THE GLASS—COOLS FASTER
Ice Bars are the new shape. They're modern. They're novel. And they are much more convenient than cubes because they melt faster and thus cool your drinks with lots more speed. Instead of exercising your wrist jiggling the ice in your glass to make it melt faster—just put in an Ice Bar and let Nature take its course.

20 TO 50% FASTER FREEZING
The patented "twin tray" feature exposes more metal to the refrigerant and cools the water from all sides. This makes it possible for the Easy-Out to freeze water 20% faster than other metal trays and 50% faster than composition trays. The division in the tray also divides the tray into two parts for more convenience.



OUT COMES ICE IN A JIFFY
Pressing on the end flaps loosens the grid from the tray. After the grid is lifted out, flexing the grid frees the ice bars—as few or as many as you like can be used and the rest put back into the trays to keep them from melting. You need not turn out the entire contents of the tray every time you need ice.

Think of these Easy-Out advantages—

1. Out comes the ice, without holding the tray or the grid under water.
2. Ice bars—instead of cubes—fit tall beverage glasses better and cool your drinks faster.
3. 20% faster freezing than other metal trays, because of the patented "twin tray" feature. 50% faster than composition trays, because it is made of quick-conducting non-corrosive metal instead of an insulator and the "twin tray" has more freezing surface.
4. **AND IT WORKS!**

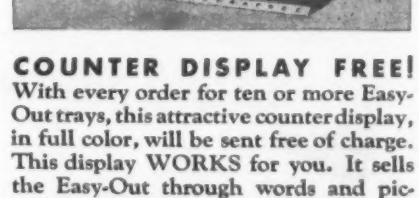
The Easy-Out twin Ice Tray gives you an opportunity to make extra profits when you sell the unit—or for replacement in boxes you have already sold. Its low-cost permits you to use it to land sales. It offers an easy sales item for your service men to sell on their calls.

Are you overlooking accessory profits? Have you considered the possibilities of repeat sales to customers who have bought electric refrigerators from you?

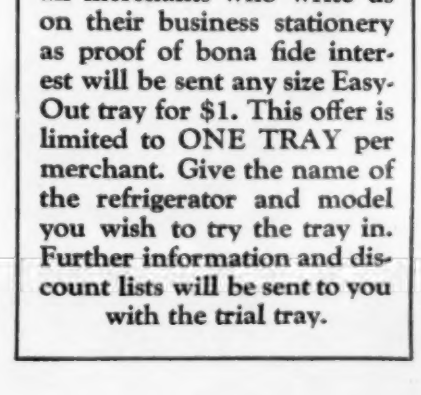
Refrigerators will soon be sold with and without the Easy-Out. Every dealer will soon offer the Easy-Out as an accessory, just like automobile dealers sell the spare tire when you buy a new car. When a customer is paying $150 or more for a refrigerator, he will not balk at a few dollars more for the Easy-Out equipment. It's the coming sensation! Be the first in your locality to introduce the Easy-Out to your old customers and all your new ones.

REFRIGERATION ACCESSORIES DEPARTMENT OF

McCORD
RADIATOR & MFG. CO., DETROIT, MICH.



ICE BARS INSTEAD OF CUBES
The very shape of the Ice Bars attracts attention. Everybody who has seen them likes them far, far better than ordinary cubical hunks of ice. But their biggest advantage is their speed in cooling drinks. They expose more surface to the liquid and consequently impart their temperature at a faster rate than cubes.



COUNTER DISPLAY FREE!
With every order for ten or more Easy-Out trays, this attractive counter display, in full color, will be sent free of charge. This display WORKS for you. It sells the Easy-Out through words and pictures and best of all, it provides a place for a sample tray that your customers may try themselves and actually see it work!

INTRODUCTORY TRIAL OFFER

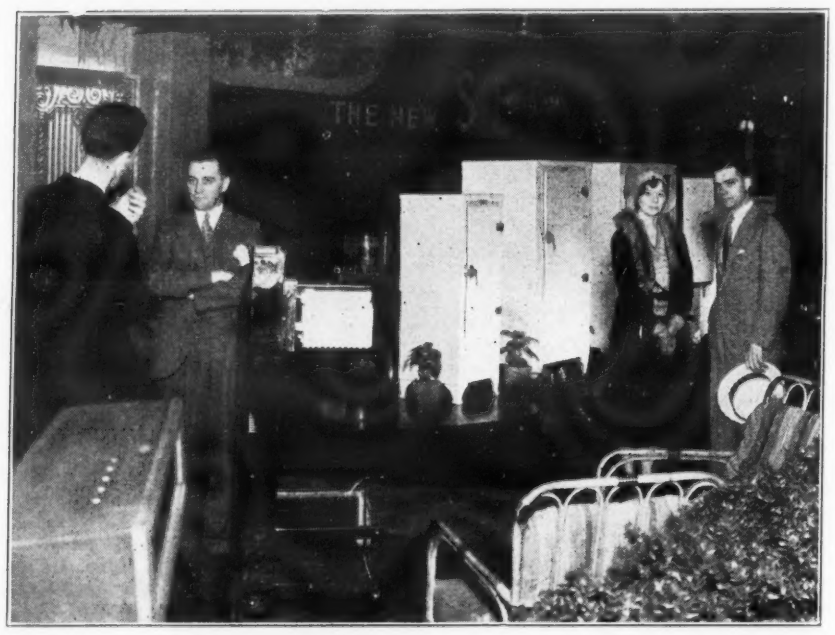
To introduce the Easy-Out, all merchants who write us on their business stationery as proof of bona fide interest will be sent any size Easy-Out tray for $1. This offer is limited to ONE TRAY per merchant. Give the name of the refrigerator and model you wish to try the tray in. Further information and discount lists will be sent to you with the trial tray.

REFRIGERATION MEN IN ACTION AT CONVENTION

Joe Donovan (standing), General Electric apartment house division manager, explains the sink type model for apartments to G. E. Miller (with the pipe), sales manager, and R. E. Mansk of the sales dept. of Cleveland Electric Illuminating Co.

C. L. Edgar, president Edison Electric Illuminating Co. of Boston, also regional director of the N. E. L. A. Refrigeration Bureau, tells W. R. Winans (wearing the ice cream pants), Frigidaire public utility representative, how the New England campaign is progressing.

Campbell Wood, Kelvinator director of public utility sales, and Mrs. Wood (at the left), entertain convention ladies from Boston. Between the Woods are Mrs. Thomas A. Haines and Mrs. Vernon Tallman. At the right is Mrs. Richard Lincoln.



Paul Jones, Servel advertising manager, and his wife drop into the display of the new Servel Hermetic where Rod Peters, assistant sales manager in charge of government relations at Washington, D. C., is making a demonstration of the removable unit to a visitor.

Carl D. Taylor of Westinghouse steps out on the boardwalk.

The pious-looking gentleman at the left is Walter Daily, G. E. sales promotion manager. On the right are Mr. and Mrs. Phillip H. Harrison, G. E. distributor for New Jersey. James E. Davidson, chairman N. E. L. A. Refrigeration Bureau, stands in the center with Dr. G. W. Allison at his right. Dr. Allison is refrigeration manager of the N. E. L. A.

E. S. Lape (at the right), of Kulair Corp., points out the features of a food display case to Mrs. M. Kelley of the Caroline Crest Hotel, Atlantic City, and R. E. Townsend, American Radiator Co., New York. George R. Lindahl, vice president of Commercial Refrigerator Mfg. Co., Los Angeles, maker of the case, is standing in the rear.

J. P. Hackenberg, refrigerator sales manager of Apex Electrical Mfg. Co., Cleveland, demonstrates with gestures how the new addition to the Apex line of household electrical appliances will help the dealer straighten his sales curve. Apex washing machines, ironers, and vacuum cleaners are also present in the display.

CARL MARCUS SELLS 57 UNITS IN DRIVE

BLOOMINGTON, Ill.—Individual honor in the recent 60-day Ice-O-Matic campaign conducted in this city goes to Carl Marcus, Ice-O-Matic salesman, who had 57 sales to his credit.

When questioned regarding the "how" of the better than one sale per working day average for the campaign, Marcus stressed the following sales hints.

"First," he said, "always know the name of the prospect on whom you are calling and greet him or her by name During this greeting never omit a friendly smile.

"Sometimes the prospect on whom I call greets me with a candid 'No' and says he or she is not interested. My come back to such a statement is, 'I can understand that you are not interested but I have come here merely to talk Surely you will give me a few moments in which to discuss Ice-O-Matic. This will not obligate you in any way.'

"Sometimes when a sale seems hopelessly lost I call on one of my Ice-O Matic owners for cooperation. This owner, of course, is a friend of the prospect who is doubtful about buying Using the influence of the owner, many a sale has been dragged out of the fire in just this way.

"Never let the customer think you are in a hurry to get the order. If the prospect wants to postpone the interview and have the salesman call later, all well and good. But, if it is at all possible, give the prospect a sound reason for visiting the show room at that moment."

When asked point blank his formula for making the 57 sales in 60 days, Marcus said, "Lots of calls and working nights.

"Breaking down my average calls," Marcus declared, "they would perhaps average one trip to the home to see the housewife, one trip in company with the housewife to the show room and finally one call to see the husband and wife together.

"I was not discouraged after a day of fruitless work or seemingly fruitless efforts. For one solid week I made no sales. During the next week I made two sales, but during the next week I secured 13 orders."

COPELAND RIDES ALONG WITH SALESMAN ON CALL

NEW BRITAIN, Conn.—A traveling display of the new Copeland domestic refrigerator, in which a Model E-661 was mounted on a car and driven throughout the city, resulted in a number of sales for the New Britain Store Fixture Co., Copeland dealer which recently opened a new branch store in the down town section.

The refrigerator was mounted on the rear of a roadster and advertisements in local newspapers invited anyone interested to phone the store and the Copeland would be taken to their home for inspection. A number of calls were received and considerable interest aroused, according to J. Oakley Bundy, manager.

Every day the city was covered in a systematic way, with particular emphasis on the better residential districts and the central business zone.

Prizes were given away during the opening week, each person entering the store being asked to write his name and address on the slip.

LAWRENCE, SEROY VISIT COAST DEALERS

OAKLAND, Calif.—R. J. Lawrence, commercial manager of the Trupar Mfg. Co., Dayton, Ohio, in company with William J. Seroy, Trupar Pacific Coast representative, recently visited dealers and distributors from southern California to Vancouver.

The Nevada Auto Supply Co. of Reno, according to Mr. Seroy, has been named state Mayflower distributor. As a starter, the company placed an initial order for a carload of refrigerators.

G. E. HEADQUARTERS STAFF PRACTICES PUBLIC SPEAKING

CLEVELAND — Informal classes in public speaking and conversation have been held on Tuesdays and Thursdays of every week for the last three months in the offices of the General Electric refrigeration department here, according to Paul Dow of that organization.

Members of the office staff get together between 5 and 6 o'clock on these evenings, and practice the forensic arts before each other.

Helpful mutual criticisms are as keen as the mutual enjoyment of the programs, according to Mr. Dow.

DISTRIBUTOR APPOINTS TWO DEALERS IN ILLINOIS

PEORIA, Ill.—W. C. Barnett of Jacksonville and the Wessler Electric Co. of Arnezville, both in Illinois, have been named Frigidaire dealers by the Domestic Electric Appliance Co. of this city.

SERVEL DISTRIBUTOR HAS 63 DEALER OUTLETS

LOS ANGELES—(UTPS)—Since entering the electric refrigeration field on the Pacific Coast last March, the H. R. Curtiss Co., 1145 Wall St. here, distributor for Servel Hermetic, has built up a dealer organization of 63 in southern California, adding 25 new dealers within the past month.

Recently appointed auto accessory dealers to handle Servels are: the Wynn Tire and Rubber Co., at 800 E. 8th St., Los Angeles, which also sells radios for the automobile and home; Blake Motor Car Co. of Santa Barbara, and the Ross Automotive Electric Shop at Upland in the Foothill section of the city.

Plumber representatives in the recent dealer appointments include E. J. Grau, 5814 Pasadena Ave., Highland Park, and the Hartsell Plumbing Co., at 210 N. Tamarand Ave., Compton. The Eastern Outfitting Co., home furnishers, with five outlets in Los Angeles and a new shop just opened on Wilshire Blvd., has also added Servel Hermetic to its refrigerator line.

DEALER HAS STAFF OF PAR BUSTERS

PATCHOGUE, N. Y.—Alfred L. Hart, dealer for General Electric refrigerators in this town, and who in April of last year sold 257 models, closed sales for 578 machines in April.

Patchogue has a population of 6,850 by the latest census. However, Alfred Hart has 18 sub-dealers, but—they are all in towns with populations of under 6,000. He ran a sales contest in April and gave $100 cash prizes. The five leaders in the April sales attained the following percentage of quota: 198, 157, 126, 113, and 101 per cent.

A half dozen of the sub-dealers in the organization went more than 100 per cent over quota. One of these, Edward Schaefer, sold 271 per cent of his quota.

TAKES LEONARD AGENCY

POUGHKEEPSIE, N. Y.—The Mitchell Furniture Co. has taken the agency for the Leonard electric refrigerator in this city.

BUILDING OWNERS

with an eye to Economy . . .

Welcome the Savings of a "TEMPRITE" *Multiple System*

LIQUID COOLER CORP. DETROIT, MICH. U.S.A. TEMPRITE LIQUID COOLING DEVICES PATENT NO. 1,578,108 OTHER PATENTS PENDING

TEMPRITE opens the way to dealer profits with water-cooling equipment for multiple systems in any type of building—old or new. Building owners are enthusiastic over the savings of the Temprite Multiple System, which is—

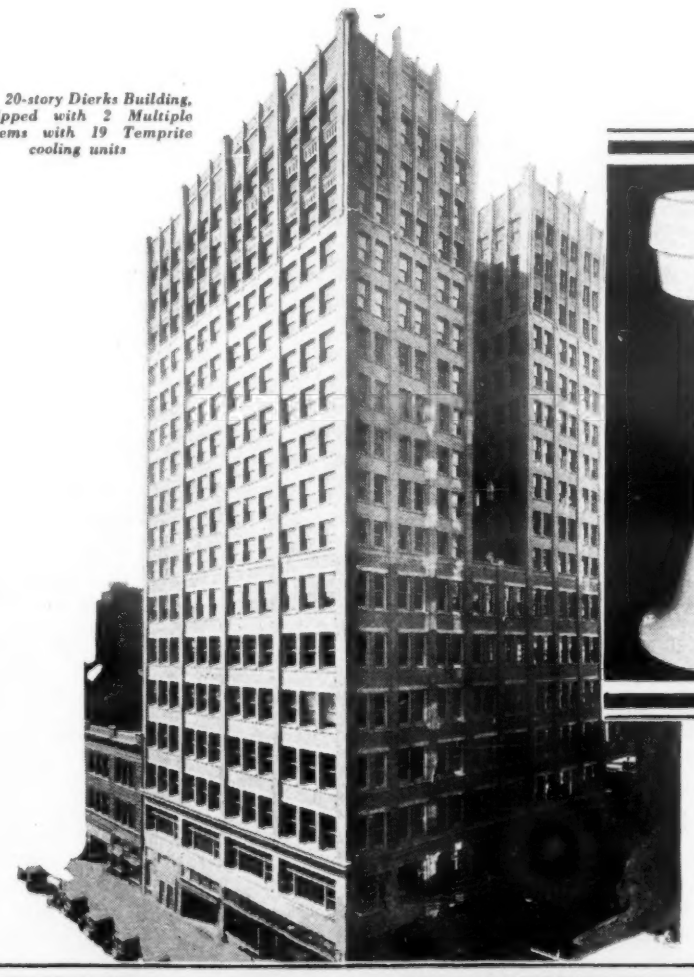
ECONOMICAL: It saves the cost of insulating lines and saves water waste because the cooling takes place at the point of usage—and the first drop is cold.

EFFICIENT: The cooling unit is an integral part of the drinking fixture.

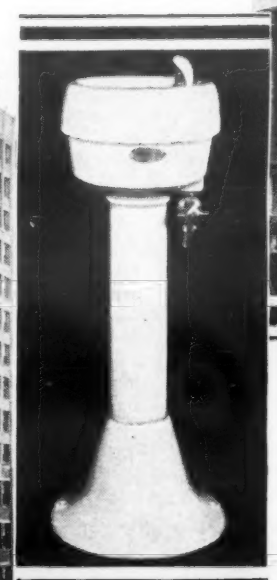
DEPENDABLE: Guaranteed for two years against defective materials or workmanship. Definite capacity at all times.

One Temprite dealer in a typical mid-western city has installed Temprite Multiple Systems in the newest and finest buildings in his territory. The Temprite Multiple System is easily installed in old or new buildings. Dealers who want to cash in on this profitable business should write at once for full particulars.

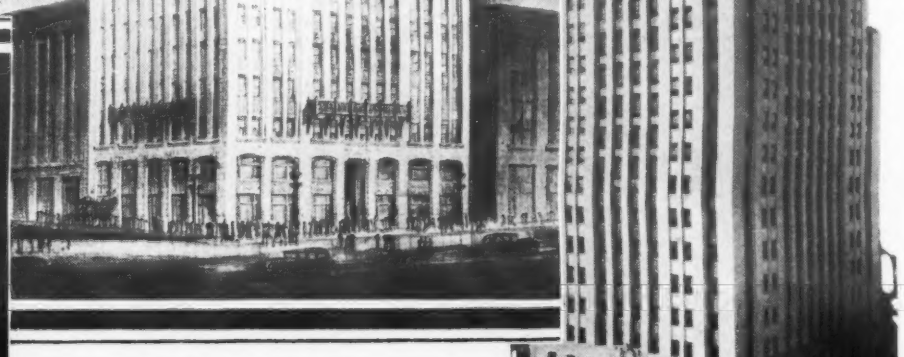
The 26-story Bryant Tower, equipped with 2 Multiple Systems with 22 No. 35 Temprite cooling units



The 20-story Dierks Building, equipped with 2 Multiple Systems with 19 Temprite cooling units



One of several styles of Temprite Pedestal or Wall type fixtures all of which contain the cooling unit



The 32-story Light and Power Building, equipped with 3 Multiple Systems using 32 Temprite No. 35W cooling units

LIQUID COOLER CORPORATION

6527 Russell Street » Detroit, Michigan

Western Coast Distributors: Refrigeration Products, Ltd., 1110 North Alameda St., Los Angeles, Cal.

Little Stories of Interesting PEOPLE In the Refrigeration Industry

THE EXPANSION VALVE

Little Stories of Interesting IDEAS In the Refrigeration Industry

By George F. Taubeneck

The roster of those present at the N. E. L. A. convention at Atlantic City last week is almost a Who's Who of the electrical industry. A week spent under the big tent there enabled the Valve to gather enough material for this kolyum to fill an average size book.

Attempting to talk about all the interesting people we saw and met at that convention in this issue is like trying to surround, at a single meal, all the dishes one likes. There simply isn't room.

Among those present were:

General Electric

T. K. Quinn, vice president of the General Electric Co., poised, alert, smiling, observant, inquiring, ready at all times to converse with old associates and new acquaintances. P. B. Zimmerman, manager of the refrigeration department, dressed in light tan, seen constantly in the company of utility executives, frank, honest, wearing an open countenance.

Snapshot: Zimmerman finishing an early morning cup of coffee in a drug store, looking at a stack of dollar books. His eye lights upon Arnold Bennett's "How to Live." He calls attention to the volume. "There you have it, gentlemen—how to live, for one dollar."

Walter Daily, sales promotion manager, acting as telephone operator at a midnight gathering of friends in the Claridge, attempting to tell the Valve a yarn about his adventure in a Chinese laundry while in Cuba, but never finishing because the phone bell seemed to be on a high frequency schedule.

Mike Mahoney, rarely caught in the public places, sawing lots of wood in private sessions. Joe Donovan, apartment house manager, and Walter Landmesser, commercial manager, selling everybody who came neath the booth. . . . F. M. Corliss, product division, sticking to his post by the cutaway monitor top like a radio operator on a disabled ship.

H. H. Bosworth, central station manager, with his magnificent head of white hair, happy in the midst of a multitude of friends.

Phil Harrison, Newark distributor, whose trucks were on the job bright and early at the convention, seeing the sights with his pretty wife. . . . Fred Bollmeyer, publicity man, as self-possessed and personable as a crown prince.

Edwina Nolan, popular home service director, inviting friends up to a G. E. party in the Claridge and then not showing up herself. . . . Unless a fancy peace offering is forthcoming (and her abili had better be good, too), it's going to be a long, cold, hard winter for Eddie, so far as this kolyum is concerned.

Frigidaire

President E. G. Biechler, making every minute count, jovial and business-like at the same time. . . . J. A. Harlan, vice president in charge of sales, spreading good cheer, turning prospects into customers, letting a few choice ones escape from his bag of yarns, making friends of competitors.

E. D. Doty, advertising manager, tall, dark, at ease in any circumstance, appraising exhibits with a critical eye, finding time to secure agreement on a new plan, talking little but using well-nurtured phrases when he did choose to speak.

Manager G. S. Jones of the public utilities division, well-built, with regular features on a fine head, selling, selling, selling . . . J. B. Reeves, regional manager from Atlanta, also doing a good selling job. . . . As noted before in this kolyum, the prime characteristic of any Frigidaire man in any position seems to be top-notch selling ability.

C. T. Mutchner, tall, suave, a good listerner, proudly displaying his new *Modern Era* publication for consumers—worthy companion to his excellent house organ, *Frigid Era*.

Kelvinator

President George Mason, straw hat, cigar, and a smile, making central station men hump to keep up with his quick, short steps, keeping on the move all the time.

H. I. Burritt, vice president in charge of sales, curly hair, well-fashioned clothes, talkative, friendly, possessing an undeniable air.

A. M. Taylor, advertising manager, heavy brown hair, glasses, quiet voice. . . . Enjoying immensely the interest aroused by his gold coin stunt.

Before the convention officially began, he distributed bags of souvenir coins around to all the hotels where N. E. L. A. men were staying (had difficulties in a couple of high-hat hostelries, but used his head and got what he wanted).

On one side of these coins was the slogan, "Invest in an electric refrigerator," while the other had a Kelvinator message and a large letter taken from the name, Kelvinator.

The first three men who could collect the right coin-pieces and spell "Kelvinator" with the large initial letters on these souvenirs won new Kelvinator domestic models.

They Read 'The Expansion Valve'

Madge Schmillie and Donna Miller of the Silver Slipper night club visited the convention wearing N. E. L. A. admission pins bestowed by generous patrons of the previous evening's entertainment. Madge claims to have been in the cast of "Rosalie" and other Ziegfeld shows, while Donna says she is direct from George White's "Scandals." We believe them!

The hook — there weren't very many V's among the coins distributed. . . . Coins were traded, bartered, sold, and exchanged over gaming tables. . . . It was quite a stunt.

J. M. Fernald, commercial sales manager, distinguished appearance, gray about the temples, erect posture, remembered as the only man who entered and played in the N. E. M. A. golf meet at the Essex Country Club in Canada a fortnight ago. . . . John Wyllie, engineering department, debonair and chummy.

Servel

Col. Frank E. Smith being ushered into the wrong room and an embarrassing situation by a muddled Ambassador hotel bellhop. . . . Maintaining his usual good-humored equilibrium even after being shown into a second awkward spot before finally getting the right room. . . . Eschewing the noise and hubbub of the convention and the Boardwalk in favor of the quiet privacy of the room he finally obtained.

V. E. "Sam" Vining, sales manager, with another new idea by the tail, making prodigious efforts to see everybody during his short stay, demonstrating that time has not lowered his steam pressure, and that enthusiasm is its own reward.

Paul Jones, advertising and sales manager, working feverishly in his hotel room, appearing at the night social functions with his charming, auburn-haired wife, discussing future plans.

R. B. Anderson, newly acquired aide for Jones, a former all-Western halfback who still looks like an athlete after two decades of labors in the merchandising field. . . . Chock-full of interesting experiences gained in the War and while on the *Chicago Tribune*.

Carl Conkey, commercial sales manager, the best-tailored man at the convention, handling prospects smoothly, taking care of visitors at the booth along with W. A. Mahoney and S. R. Cooper.

Jack Carter, New England division manager, handsome and personable fellow who wondered how the Valve managed to have any family life during his widely dispersed travels . . . That's an easy one to answer . . . He hasn't any.

Majestic

Don M. Compton, vice president and general manager of the Grigsby-Grunow Co., came for a single day, and was whirled through enough appointments in that day to make even a man of his energy and staying powers dizzy . . . Vernon W. Collamore, general sales manager, is an extremely easy-to-meet man, acts as if talking with you has made his day complete and successful, and has a jolly smile which is in keeping with his ruddy, rotund physiognomy.

Robert Brunhouse, refrigeration sales manager, recently acquired from Merchant & Evans (the Philadelphia concern which is the arch-enemy of public utility merchandising), was cultivating central station friends as assiduously as his former employers have been attacking them. . . . And his actions indicated that his new role of friendship suits him to a "T."

Among the affable and accommodating men in the Majestic booth was Lance Underhill, of the refrigeration sales department, dark, medium-sized, helpful. . . . From Philadelphia came home economist Edith Ault, whose charm is as delectable as her desserts. . . . She is another member of the new school of home service, which is more sales-minded than kitchen-minded.

Westinghouse

Carl Taylor, assistant sales manager of the Westinghouse Electric and Mfg. Co., in charge of the refrigeration department, is a newcomer to this kolyum.

He is a heavily-built man, five feet eight or nine inches tall, with a round face, light brown hair, and a pair of jovial eyes.

Like M. C. Morrow, merchandising manager of the Westinghouse organization, Mr. Taylor has risen from the ranks. He is a direct man, speaking to the point without apologies or subterfuge, wasting no words and no time. His appearance is that of a man with an infinite capacity for work.

Mr. Morrow is tall, angular rather than round, and has an immediately attractive combination of sophistication, conviviality, and sly good humor in his countenance. He is an observant man, and looks as if many of the things he sees amuse him immensely.

We Have With Us:

E. S. Lape, secretary-treasurer of the Kulair Corp., Philadelphia, calm, cool, courteous, complaisant. . . . Walter Frantz, Apex vice president in charge of manufacturing, tall, dressed in gray, competent, confident. . . . E. F. LeVee, Eastern sales manager for Apex, somewhat small, youngish in appearance, mature in speech. . . . Walter Seeger, vice president, and Jack Leonard, sales manager of the Seeger company, popular everywhere—and they covered plenty of territory.

Vincent Butler, secretary of the Copper and Brass Research Association, dark, smooth, debonair, attempting to meet the convention *in toto*, personifying the inquiring reporter, gathering information in a manner thoroughly professional and entirely pleasant.

George W. Allison, refrigeration manager of the N. E. L. A., who during this present refrigeration drive has been living the hectic Pullman and platform life of a candidate for national office just prior to election day, large, dark, with glasses, a persuasive speaker.

C. E. Greenwood, commercial director of the N. E. L. A., tall, with well-chiseled features, a man of definite ideas and convictions.

Mr. Greenwood's blonde and attractive secretary, aptly named Miss Stately, attempting to make her pencil keep pace with the rapid-fire comments made during the meeting of the Electric Refrigeration Bureau meeting, held too early for comfort Thursday morning.

Vincent Lopez, reported to have received $1,000 a night for leading the orchestra which played for the convention social functions, short, olive-skinned, expressionless, squiring radiant Indian Princess Lou-Scha-Enya about after each had finished entertaining the convention guests.

Paul Clapp, managing director of the N. E. L. A., confident and vigorous, chin up, dark hair receding from forehead, stub nose. When speaking on the platform he has a raptly sincere expression on his face.

He talks slowly enough, but the thought and movement of his speech marches steadily ahead without digression, so that he generally arrives at his oral destination with unusual dispatch.

Utility Executives

J. E. Davidson, president of the Nebraska Power Co., past president of the N. E. L. A., and chairman of the Electric Refrigeration Bureau, is quite tall, built along the wedge pattern so acceptable to football coaches (trim body tapering down from broad, square shoulders), a fringe of shining silver hair remaining. . . . Knows what he wants, knows that he can get it, handles a committee like an old-time coachman with eight-in-hand, combines praise with admonition.

W. C. Mullendore, vice president of the Southern California Edison Co., the fiery orator of the convention. . . . Put horns on Senator Norris and a pointed tale on Governor Pinchot, made his audiences smell brimstone, flew the flag and chased the eagle until his hearers were ready to take up arms and look for the whites of socialistic eyes.

Martin Insull, president of the Middle West Utilities Co., who works in a manner entirely opposed to that of Mr. Mullendore. . . . Makes his point by persuasion, rather than by forensic pyrotechnics.

Has a fine large head, with white hair and shaggy eyebrows. . . . Wears clothes of English cut. . . . Reasons so clearly and lucidly that his arguments seem almost unanswerable.

Marshall E. Sampsell, president of the Central Illinois Public Service Co., tired-looking, a man who has learned the science of innocuous words, who qualifies his statements carefully, and who has a wide vocabulary and a turn for expressive phrases.

C. E. Groesbeck, president of the mighty Electric Bond & Share Co., tall, slim, with horn-rimmed glasses, unsmiling, factual-minded.

Preston S. Arkwright, president of the potent Georgia Power Co., another tall utility executive, bespectacled, some silvery hair remaining, is best toastmaster or master of ceremonies the Valve has ever heard.

Mr. Arkwright knows that the man who introduces the speakers should himself say little, yet the few words he says are such models of compact expression that one feels no more could possibly be said. . . . A deft touch of humor and a certain delicacy of presentation gave Mr. Arkwright's little speeches at the public policy session, Thursday night, a flavor as rare as it is savory.

J. F. Owens

James Francis Owens, new president of the N. E. L. A., is known familiarly as "Jack." Before becoming head of the Oklahoma Gas & Electric Co., he was a farm boy, a school teacher, a school principal, a newspaper reporter, a manager of a small town gas company.

His success has been built upon knowledge of men, upon his ability to attract and hold good associates, and upon his talent for anticipating the wants of consumers.

He likes people, and personal service is one of his greatest pleasures. He is, nevertheless, an aggressive fighter.

A deep low voice he has, a high forehead, strong nose, and a firm, compressed mouth.

Friday noon after the convention was officially adjourned, we found him half reclining in a chair, hands in pockets, almost entirely alone in the headquarters room of the Auditorium, very tired, very happy, very quiet.

He was quite ready to go back home.

W. Alton Jones

Retiring president of the N. E. L. A., first vice president of Henry L. Doherty & Co., director in more than 100 corporations, W. Alton Jones is, nevertheless a very unpretentious individual.

He directed the proceedings from the rostrum in as comfortable and at-ease a style as if he were a Sunday School superintendent, facing a small group of lifelong friends and neighbors.

Typical close-up: after the conclusion of the pageant, "The First American," given by native American Indians, Tuesday night, Vincent Lopez and his band played lively music as a "chaser" for the audience.

Jones was found right by the band, dancing away at a great rate with two golden-curled little girls.

Following this homey picture, the Indians surrounded him, and he gravely went through some sort of a welcoming ceremony with them.

J. Robert Crouse

Unheralded and unsung, J. Robert Crouse, the "father of cooperation" in the electric refrigeration industry, was found in a convention audience.

He has a shock of iron-gray hair, heavy glasses, and a portly figure.

To all electric refrigeration men he had but one question to propound: "Are you making any money?"

Henry L. Doherty

A little old man with bristling whiskers, a high-pitched voice, and as much pep as a colt, addressed the assembly Wednesday morning.

More than three decades ago he had presided at a similar assembly. He is a veteran of veterans in the industry, yet just as full of ideas as he was be-

(Concluded on Page 13, Column 1)

Little Stories of Interesting PEOPLE In the Refrigeration Industry

THE EXPANSION VALVE

Little Stories of Interesting IDEAS In the Refrigeration Industry

By George F. Taubeneck

(*Concluded from Page 12, Column 5*)
fore the turn of the century. His name is Henry L. Doherty.

Before beginning to read his paper he asked the chairman, his first-in-line subordinate (W. Alton Jones), how much time he had to read the voluminous manuscript he had before him. He then began to look at the manuscript with a disapproving eye.

He would read a paragraph out loud, then scan through two or three pages silently. These lengthy silences were punctuated with blasting "har-r-rumph" sounds, and when Mr. Doherty harrumphs, everybody sits up and takes notice.

Very few words of his manuscript were read to the audience. Occasionally some of the material he read silently, gave him an impetus to speak extemporaneously, which he did with neatness and force.

Speaking before an N. E. L. A. convention was neither an adventure nor an opportunity for Henry L. Doherty. It was an old story, and he did it just as if he were dictating a letter to a secretary.

Two Busy Men

Two of the busiest men at the convention were F. M. Corliss, product manager of the General Electric refrigeration division, and S. R. Cooper, educational director for Servel, Inc.

At any hour of the day one could walk by the G. E. booth and find Corliss explaining the whys and wherefores of the glass-enclosed monitor top. He was always surrounded by attentive listeners, who walked away at the conclusion of his demonstration with satisfied smiles.

Cooper did the same job for those who came to the Servel booth to inspect the glass-enclosed Hermetic unit. Cooper likes to talk about this machine, and has an entertaining way of doing it.

Three Editors

Loring A Schuler, formerly editor of *The Country Gentleman*, and present editor of *The Saturday Evening Post*, successfully competed with President-elect J. F. Owens, and Martin Insull to hold the attention of a big crowd of women listeners at the women's committee session Tuesday afternoon.

His speech on "The Home 10 Years from Now" is printed in full in the *Refrigerated Food section*. He is big, bald, and soft-spoken.

Gus W. Dyer, editor of the Southern Agriculturalist, made a rip-snorter of a speech Tuesday morning on "The Electric Revolution."

Lanky and cadaverous, he has a repertoire of highly effective gestures, a great shouting range, and a bagful of clever phrases. He speaks in the same manner as the old-fashioned evangelist.

His listeners divided themselves into three classes: (1) those who laughed uproariously and applauded enthusiastically — chiefly older men who had been brought up on that school of oratory; (2) those who laughed at Mr. Dyer and his revival-meeting style of delivering—a small minority ; (3) those who sat stony-faced and expressionless throughout —those who were too stiff to unbend, too sanctimonious to approve of the levity, or too slow to catch the point.

His most appreciated cracks: (1) "At the big printing plant in the Carolina mountains a tree starts in at one end and comes out at the other a copy of Shakespeare;" (2) "Business is run by brains, government by scatterbrains."

Fred D. Van Amburgh, editor of *The Silent Partner*, spoke before the accounting section Tuesday afternoon, on "How to Fail." We didn't go to hear him, and hence can't describe him. We've seen his pollyanna periodical, however. That's why we didn't go to hear him.

David Lawrence

One of the best-informed speakers at the convention was David Lawrence. His speech, reported elsewhere in this section, reflected the views of a man who has his sights adjusted to world horizons and to the long look.

For many years he was the dean of Washington correspondents. Now he is the successful publisher of the *United States Daily*. His experiences at the capitol have given him an expansive view of international economic problems which enable him to get our own local conundrums into their proper perspective.

He looks like a reporter—is deliberate of motion, has a bit of a bay window, a large head on sloping shoulders, a big nose, a pocketed face, an impeccable choice of words, and an extensive vocabulary.

Arthur Brisbane

"Yellow journalism" was invented by Arthur Brisbane, so the story runs. When Sunday editor of Joseph Pulitzer's now defunct *New York World*, Brisbane began putting "ideas" into the columns of his sections which brought in readers by the thousands.

His ideas, coupled with a "Yellow Kid" cartoon (which gave "yellow" journalism its soubriquet), started a whole new school of newspaper editing.

He now reaches the largest editorial audience any writer has. Mr. Arkwright's introduction cannot be improved upon:

"Everybody who is able to read knows of Arthur Brisbane. He has a tremendous grip on the public mind. Mr. Brisbane infuses into his work a rare and inimitable style. He is a keen observer. His narrative is simple and subtle. He knows how to combine small words to convey great ideas."

Mr. Brisbane's concluding words bear out Mr. Arkwright's final sentence:

"The future belongs to the public. Everything in the country belongs to the public. Your systems belong to the public, just as the poor peasant with his donkey in southern France has the highway that was built by Caesar—Caesar doesn't own it, they do. You build it, they will have it."

Brisbane is not a good public speaker. He is nervous, can't keep in front of the microphone, does not have a carrying voice. But the words he speaks are unimpeachable.

One thing strikes the observer about his presence—his high, broad forehead, part of a head which appears as if it were about to burst with brains.

Gerard Swope

One of the few speakers who did not spend his allotted time attacking government in business and the public enemies of the utilities was Gerard Swope, president of the General Electric Co.

Mr. Swope had an idea. He thought it time for the utilities to consider "insurance against the uncertainty of life, provision for old age, and assurances of steady employment or amelioration of the tragic circumstances of unemployment." His ideas took root when President Jones was moved to appoint a committee to report on these suggestions at the next convention—the only new committee appointed during the official sessions.

A small man, Mr. Swope carries a very large head. Here his resemblance to Napoleon stops, however, for Mr. Swope has a rather high voice, carries his head at a downward angle, owns a very prominent nose, has bushy eyebrows, and is not particularly assertive.

Thomas A. Edison

Conventioneers had two peak moments. One was at the public policy session Thursday night, when Jessica Dragonette, a petite and ethereal soprano with a voice like an angel, sang as Jenny Lind was reported to have sung in her American debut.

The other big moment was Thomas A. Edison's greeting, sent over a telephone wire from his winter home in Fort Myers, Florida.

His voice came, clearly audible, but husky and vibrant with emotion, to several hundred men who listened as devoutly as if a deity were addressing them from a cloud.

President Jones first spoke to Mr. Edison in these eminently quotable words:

"Ladies and Gentlemen: I ask you to pause for a moment and think of two great benefactors of the human race. We read of one of them in the mythology of the ancient Greeks. His name was Prometheus. He dared to snatch fire from heaven and bring it down to earth. For this audacious service to his fellow men he was doomed to lifelong torture by the jealous gods.

"America has her Prometheus. He chained the lightning. He gave the world electric light. The Fates are kinder than in ancient days. To him has been given not punishment, but honor: long life, happiness, the universal reverence of his fellow men.

"It is our privilege now to pay him homage. On your behalf I am about to extend our greetings to him. I invite you to listen with me to the voice of America's great citizen, Thomas Alva Edison.

"Mr. Edison, this is W. Alton Jones, president of the National Electric Light Association. Seven thousand delegates gathered in convention in Atlantic City, and tens of thousands of members of the electrical industry all over the United States, have paused at this moment to pay tribute to you, whose genius laid the foundations of this industry and whose character and example continue to be its inspiration and its guide."

Mr. Edison's response, which was amplified so that everyone in the massive hall could hear, was:

"I appreciate your greetings. My message to you is, be courageous. I have lived a long time. I have seen history repeat itself again and again. I have seen many depressions in business. Always America has come out stronger and more prosperous. Be as brave as your fathers before you. Have faith. Go forward."

C. U. Williams

Many years ago C. U. Williams was a prosperous Willys-Overland dealer and garage owner in Bloomington, Ill. He knew how to sell automobiles, had some ideas on publicity and its uses, and was a born dramatizer.

He ordered automobiles from Toledo in big shipments, met these trains with the Bloomington brass band, organized parades of his new models, held contests, kept constantly in the Bloomington civic eye. He sold a great many automobiles.

Interestingly enough, he had a son who was as much a born mechanic as the father was a born merchandiser. The son built a domestic oil burner for his mother, made an electric refrigerator for his own amusement.

While the son, Walter, was away at the Great War, the father conceived the notion of merchandising the oil burner. It became the Williams Oil-O-Matic. Some time later the refrigerating machine Walter Williams had developed became, with improvements, the Williams Ice-O-Matic.

C. U. Williams is now white-haired, but he has apparently lost little of his vigor, none of his dramatic sense. Around him he has gathered quite a galaxy of "pep men."

The credit manager, for instance, is a rip-snorting song leader. The assistant to the president is an oratorical spellbinder of the first water. In the sales department are authors, lecturers, actors. When Williams wants to put on a show—which is often—good talent is immediately available.

Just now the senior Mr. Williams is experimenting with an airplane equipped to broadcast music (and the Williams story, of course) from the clouds. He likes the idea.

Walter Williams is buried in the plant, attempting to devise ways and means of increasing production to meet the unexpected 1931 sales demands. With the oil burner season almost upon him, his plant still is trying to catch up with orders for refrigerating machines.

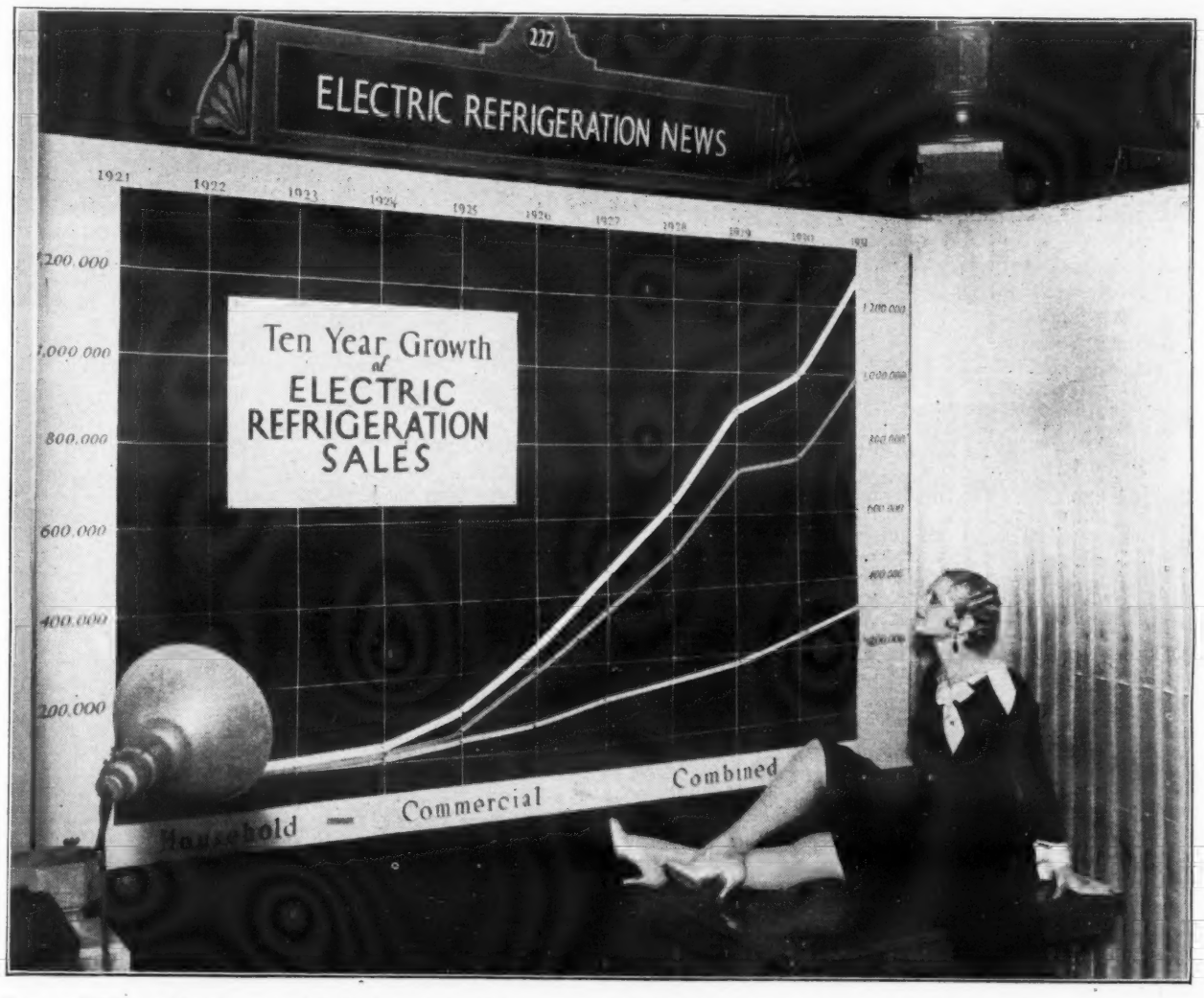
W. W. Williams

W. W. Williams, inventor of the Williams Oil-O-Matic and the Williams Ice-O-Matic, has his own private plane, which was used during the recent Bloomington campaign to broadcast music and announcements regarding Ice-O-Matic.

But Mr. Williams' interest in aviation goes farther than recreation and sport. He is now building an airplane motor of his own design. In the near future one of these motors will be ready for its initial tryout.

He has also some ideas on domestic air conditioning, which some day may crystallize into an Air-O-Matic. And again, this device may never pass the embryo stage; for Walter Williams has other schemes up his sleeve and, like all of us, he finds Time to be his greatest obstacle.

This Is Our Idea of Curves



Donna Miller, chic chorus girl, looks at the sales curves of the electric refrigeration industry as depicted in the Electric Refrigeration News booth at the N. E. L. A. convention in Atlantic City.

$75,000 on a Horse

George F. Hill, Copeland dealer at Norway, Me., is $75,000 richer as a result of winning on the second horse in the Irish Hospital Derby Sweepstakes. Mr. Hill is a Copeland dealer operating under the Appliance Engineering Co. of Boston, which is headed by E. A. Ternune.

A dispatch from Norway, Me., to the Boston Globe says, "The excitement finally over, the last congratulating neighbor gone home, the telephone silent, and the last newspaper man and camera man departed, George F. Hill, Norway business man, lumberman and church official, wearily called it a day as the three other members of his family gathered around the piano for a bit of music, a daily custom.

"Their songs were all of a thankful nature, and there was a hymn among them. Although Mr. Hill was a $75,000 winner in the Irish Hospital Derby Sweepstakes today, he makes religion a part of his business and his home life.

"Winning of a fortune will not change his charming family. Miss Mary Hill, 9, who will be a member of Norway High School graduating class tomorrow, and Margaret Hill, 15, a member of the sophomore class in the same school, attended school sessions today, although they were both fully aware that today was destined to be the big day of their father's life.

"He had refused $7,000 for his ticket on Orpen and was taking chances which might win him a fortune, yet no member of the family even considered that the girls might be absent from school for half a day.

"Not even Mrs. Hill listened in on the radio broadcast and Mr. Hill, busy with business, forgot that the race was to be broadcast until Ralph Sturgis frantically phoned for George to hurry down, 'the race is on.'

"Mr. Hill has bought lottery tickets all his lifetime. He will take a chance on anything. This particular ticket came to Mr. Hill this way: a Norway High School student sold several books of the tickets on the Irish Derby. He was about through, he only had one ticket left. He offered this ticket to half a dozen business men, but all complained that times were hard and declined to buy. The student went into Mr. Hill's place of business and merely remarked, Like to buy a ticket on the Irish Derby?'

"'Darn right I do,' Mr. Hill replied and reached for his pocketbook.

"The young man also is a winner; the agent who sells a winning ticket gets an amount also from the lottery equal to 10 per cent of what the winner gets. The young man will use his $7,500 for a college education.

"The Hills will continue to live in Norway. The business will go on. Mary will go to Lassell in the fall. Margaret is hoping for a fur coat.

"'I'll take good care of this money,' said Mr. Hill tonight. 'I'm neither a spendthrift nor a miser. The money will be used to very proper purposes; it won't go out of circulation'."

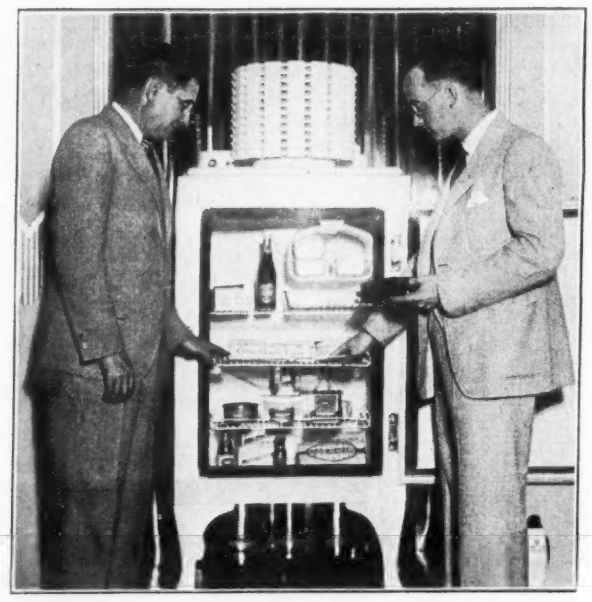
Other winners included: Joe Kennedy, Boston negro janitor, who won $150,000; a blind 60-year-old London basketmaker; a London grocer's clerk whose employer had discharged him for gambling; Rose Milligan, Irish barmaid, who says she will buy a saloon with her $50,000; a crippled 39-year-old woman millworker in Manchester, N. H., who won $34,099; a grocer in Hopkinsville, Ky., who won $136,399 on Cameronian, and an elevator starter in the Keith Bldg., Cincinnati, who will receive $50,000.

COLONEL SMITH VISITS THE N. E. L. A. EXHIBITION

Col. Frank E. Smith (left), president of Servel, Inc., with Carl D. Taylor, assistant sales manager of Westinghouse; Nat Elin, president Elin Co., Newark, N. J., Westinghouse distributor, and T. J. Newcomb (right), Westinghouse district supervisor of metropolitan New York division.

Col. Smith and E. G. Biechler (center), president and general manager of Frigidaire Corp., discuss the situation with W. H. Sammis (left), and T. A. Kenney of Commonwealth Southern Corp., and W. J. Stanton (with the cane) of Lucien C. Brown Co., New York City.

Col. Smith inspects the Kelvinator and Westinghouse displays with W. C. Noll (left), of General Electric, and Walter Seeger (wearing felt hat), and Jack Leonard (right), of the Seeger Refrigerator Co.



F. M. Corliss, General Electric engineer, explains the new sliding shelves to Dr. Allison of the N. E. L. A. Refrigeration Bureau.

An Enthusiast for Electric Refrigeration

A. M. Taylor, Kelvinator advertising manager (left), gets a visitor's comment on his glass-encased cutaway model.

J. A. Harlan, vice president of Frigidaire (right), joins H. W. Burritt, vice president, and George W. Mason, president of Kelvinator (on the left), in a discussion of electric refrigeration from the woman's viewpoint.

Preston S. Arkwright, president of Georgia Power Co., Atlanta, one-time president of the N. E. L. A.

E. D. Doty (left), Frigidaire advertising manager, H. W. Burritt, Kelvinator V. P. in charge of sales, and J. A. Harlan, Frigidaire V. P. in charge of sales, find an item of mutual interest in the NEWS.

NEW MARKETS BEST HOPE FOR BUSINESS

ATLANTIC CITY—"A business depression is the sum total of the effects of the ill-health of several industries, and when we can find out when those respective industries are going to get well, we can tell when the period of prosperity will return," David Lawrence, publisher of the *United States Daily*, told the first general session of the N. E. L. A. convention Tuesday morning, June 9.

Mr. Lawrence picked out four major industries which are ailing, and stated the chief problem of each, as follows:

1. Automobile industry. Its problem is to find a market for its excess or potential products, for it is geared up to make many more cars than are now used in the domestic market.

2. Radio industry. Its problem is also one of marketing; how to sell new sets and how to stimulate the purchase of replacement sets. This industry also has a price market with which to cope.

3. Construction. Its problem is the reclamation of credit machinery to keep up the construction which was stimulated shortly after the War through the under-building of the War period. This industry waits upon the return of first and second mortgage money.

4. Agriculture. Its problem is that of marketing its surplus. This industry has been several years ailing. Since the law of supply and demand knows no national boundaries, and since we have created an economic unit in the United States, we must seek a way out in cooperation with other grain-producing countries.

New Markets for Surplus Goods

"We therefore find," stated Mr. Lawrence, "that all these sick industries have a common ailment; they are looking for new markets; they are looking for a place to distribute their surplus. For many years we consumed everything that we produced. Now we consume 90 per cent of what we produce.

"It therefore becomes a problem of whether you will continue to produce just enough for home consumption, reverting to pre-war standards, deflating labor and wages, and going back to the living habits of two or three generations ago. That means strict economy on the one hand and a limited market in the domestic sense on the other, with a bit of foreign trade occasionally to give us profit. That is one side of the picture.

"The other side is whether we shall find a market for that extra 10 per cent, whether we will make up our minds that we are going to sell more goods and we are going to find a place other than in the United States to sell them. In other words, we have economized now to the point of where the sales curve has got to go up, and the only way the sales curve can go up is to find a place to sell that extra 10 per cent.

"It is common to all industries; it is part of the general problem of business readjustment in America. If we are to find extra markets, we must discover a way to increase the purchasing power of the other countries. When you reflect that we sold $1,200,000,000 worth of goods in 1929 that we didn't sell abroad in 1930, you will know something has happened to the entire employment structure of this country, because if you could analyze the meaning of a drop in exports of $1,200,000,000, you would find that it accounted for a million and a half men and families, and you can see instantly, the effect of subtracting from employment any such large number of persons.

"You must realize also that at the same time we lose this $1,200,000,000 in imports. In other words, we failed to buy from the rest of the world approximately the same amount that they failed to buy from us. That only means one thing, that for the world to get back on an economic basis, there must be interchange.

Tackle Trade Barrier

"A world depression is a form of world stagnation of trade, and if you are to have interchange, you must have the interflow, not merely of capital, but of goods. You must have a system whereby the credit machinery of the world is adjusted so that you can finance trade. You must have a low enough money rate throughout the world, so that you can finance trade and finance enterprise throughout the world. And if you are to have an interchange of goods, you must tackle at once the barriers to trade and interchange.

"Of course that leads us to the tariff. There is no issue of greater importance today than the interchange of commodities as blocked by modern systems of tariff. Now that does not mean free trade; that does not mean protection; that means interchange. It means reciprocity.

"There is a point at which goods will move and there is a point at which goods will stop moving. And the effort of the world today is to find a means of movement, and the effort of Germany and Austria to bring about a customs agreement, the discussion in Europe of an economic federation, the tariffs imposed recently by Canada, the discussion throughout the world of tariffs, has for its objective only one thing, to bring back trade, interchange.

"And if it is necessary for us some day to adjust ourselves to the bargaining tariffs which may be set up in Europe, we will be compelled quickly to adjust ourselves thereto. Here again there are factors beyond our control. We sometimes think we have the ordering of the entire world. Many of these factors will be settled abroad and we will adjust ourselves to their adjustment.

"There will always be experiments," Mr. Lawrence averred. "The world has tried many of them but they all come back to the individualistic conception. What then can we say of the future of our American business in this world system?

"We must not forget that Uncle Sam has an annual income of something like $370,000,000,000 of wealth. That annual income has to be reinvested. In what will it be reinvested? Will it be reinvested in our own country for further expansion of our facilities here, or will that capital go abroad to assist in the expansion of the other countries of the world?

Flow of Capital Abroad

"It occurs to me that our capital will flow in even greater quantities abroad in the next 10 years and that the orders will flow back in even greater quantities for our steel and our raw materials and our manufactured products.

"Governments are becoming, not only here but throughout the world, sensitive to popular discontent wherever the economic foundations are at all threatened. Governments in other countries are encouraging the formation of cartels, of monopolies.

"Other countries competing with us, with a much more flexible system, a much more flexible development of monopoly, are being observed by us, and we are wondering what power of government will be used abroad against us.

"In fact, this whole question of governmental interference or governmental cooperation, whichever term you wish to use, is going to be one of the biggest issues that we must face, not only in this country, but in every country, because parliaments are, after all, responsible in the democracies to the popular will and cabinets are overthrown when unemployment becomes acute.

"Sooner or later, as the present depression unfolds itself, as we find a way to finance our trade abroad and to finance our difficulties at home, we shall be looking to other countries for the stimulus of our industries. Sooner or later there is a turn coming; just as prosperity is inevitable, just as depressions must come to an end, we must begin to prepare ourselves for that greater period of readjustment when we go from a depression into what people call a normal period.

"It is difficult and I don't think it is particularly important to indicate the exact hour or minute when a depression ends and a normal period begins, because some of the things that are characteristic of a normal period have already begun, and it is just as difficult to draw a picture of that as it is to generalize about business in general.

Danger in Upturn of Prices

"But when this readjustment is finished, we will face a period of expansion, and it will challenge our ingenuity, it will require of us new facilities, and it will test our credit capacity again, for there are as many dangers in this sudden upturn of prices as there were disasters in the sudden decline in prices.

"But to understand the future it seems to me we must have a perspective not of the calendar year, not of this month corresponding with a year ago this month, or this quarter and a year ago this quarter, we must have the perspective of an era, we must have the perspective of an epoch; we must find out whether we believe that we have the resources and the wealth and the income to remain a going concern and a profitable concern, and who is there in America who doubts our capacity for production, our capacity for distribution?

"Who is there in America who has lost any faith in the power of this country to compete on equal terms, if necessary, and on better terms in some instances and on inferior terms in other instances, with the other countries of the world. It is thus by renewing confidence in ourselves, that we can look forward to the future with confidence."

G. E. Exhibits Its Millionth Unit

This picture of the gold-plated millionth G. E. refrigerator which will be presented to Henry Ford next Saturday is obscured by Jack Leonard (Seeger) the slightly bald gentleman with straw hat in hand.

LEARY PLANS EXPANSION

DANBURY, Conn.—Edward J. Leary, Servel dealer, has sold eight refrigerators in the past few weeks.

Mr. Leary, in anticipation of a record summer for electric refrigerator sales, has enlarged his store at 9 Main St.

Two local furniture stores have added electric refrigerators. Landsman's Furniture Co. is now selling the Westinghouse unit, while the New England Furniture Co. is handling the Copeland line.

MULLENDORE MAKES ATTACK ON NORRIS

ATLANTIC CITY—In a vigorous attack on Senator Norris, Governor Pinchot, the Socialist Party, and various allied organizations, W. C. Mullendore, vice present of the Southern California Edison Co., told the second general session of the N. E. L. A. convention Thursday morning that the real power issue does not revolve "around the domestic light and power bill as Senator Norris would have the public believe," but around attacks "to the end that Socialism shall replace American individualism."

"Placing the annual tax bill of the people of the United States—federal, state and local—at $12,000,000,000, the cost of crime at $12,000,000,000, and the receipts of bootleggers at $2,000,000,000, he contrasted these figures with the total electric light and power bill.

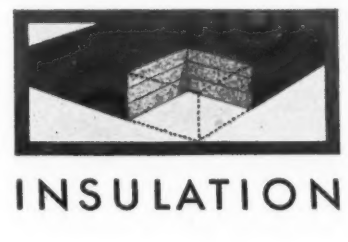
"If the electric light and power bill were reduced by 10 per cent," he said, "it would mean less than one cent a day to the average American householder. Why does this item absorb the attention of that group of United States senators and those governors of great states who maintain that electric light and power is the greatest issue before the people of the United States today?"

KELVINATOR MOVES COLLINS TO ORDER DEPARTMENT

DETROIT—H. K. Lyons, manager of the Kelvinator order and distribution department, announces the appointment of L. D. Collins as southwestern correspondent, succeeding John Briggs, who resigned to rejoin his family in Tennessee.

Mr. Collins has been on the Kelvinator payroll since 1926, working in the planning and timekeeper departments. Before taking his present assignment he was assistant to the head timekeeper.

EFFICIENT

Balsam-Wool  Sealed Slabs

INSULATION

UNEXCELLED heat-stopping efficiency, durability, and its *money saving* quality are sales points on Balsam-Wool Insulation consistently stressed in its advertising in *The Saturday Evening Post* and other magazines reaching *retail buyers* of quality merchandise. These are a few of the reasons why the public has *real confidence* in refrigerators lined with Balsam-Wool—*true insulation.*

WOOD CONVERSION COMPANY

Mills at Cloquet, Minnesota

Industrial Sales Offices:

CHICAGO, 360 No. Michigan Ave. NEW YORK, 3107 Chanin Bldg. DETROIT, 515 Stephenson Bldg.

Also manufacturers of Balsam-Wool Refrigerator Car and Steel Passenger Car Insulations; Balsam-Wool Insulations for Airplanes and Motor Buses; Balsam-Wool Acoustical Treatments; Balsam-Wool Building Insulation; Nu-Wood, the All-Wood Insulating Board and V-Joint Lath

ICE-O-MATIC DRIVE NETS 189 ORDERS

BLOOMINGTON, Ill.—The 60-day Ice-O-Matic campaign of the Illinois Power & Light Corp., which ended in Bloomington on May 31, produced 189 sales.

Employes of the Williams Oil-O-Matic Heating Corp. cooperated in the campaign. At a meeting preceding the campaign, cards were passed out to each of the employes on which was written a pledge in which the signer promised to assist in making at least one Ice-O-Matic sale during the campaign. Each employe present signed the card, making 100 per cent employe registration and participation in the campaign.

On April 1, the opening day of the campaign, bombs were exploded at intervals at strategic points throughout the city. Aware of the fact that various individuals would be questioned as to what the cannonading meant, all the barber shops and hotels in Bloomington, as well as the post office, were informed the day before.

Monday and Friday noon "pep" meetings of the employe organization kept up the impetus and enthusiasm with which the drive opened.

In addition, two evening parties were held and were known as "family nights." Employes and their families were present at these meetings. Also the sales force met each morning and planned the day's activity and discussed problems and sales of the preceding day.

In most instances, employe participation took the nature of turning in prospect's names. Handing in a name signified that the prospect was a bona-fide one, one which had been contacted by the employe turning in the name. After this, the regular salesman contacted the prospect.

Wherever necessary, the employe handing in the name also called on the prospect in company with the salesman.

Certain periods of the campaign were devoted to contacting classified prospect lists. For instance, one day a list might be made up consisting entirely of lawyers, another day the list might be doctors and yet another, railway engineers. In such instances, the salesman called on the prospect equipped with a list of Ice-O-Matic owners found among other members of the same profession.

One of the stunts employed during the campaign was to have a plane fly over the city equipped with amplifying equipment which broadcast music and Ice-O-Matic announcements from the air. In addition, direct mail and newspaper advertising were consistently used.

TEXAS COMPANY BEATS QUOTA SET BY FACTORY

FT. WORTH, Tex.—The sale of Starr Freeze electric refrigerators in the Texas territory has exceeded the factory quota, according to W. W. Slaughter, vice president of the Shield Co., distributor for the Starr Freeze in Texas.

Mr. Slaughter stated that his company has contracted for shipments of Starr Freeze refrigerators to dealers in all key cities in Texas.

Vice President Knapp Outlines Norge Program

Howard Blood, president, and John K. Knapp, vice president of Norge Corp., Detroit, were speakers at the recent distributor meeting at Chicago. Both are seated at the speakers' table.

FOUR COMPANIES NAME WESTERN DISTRIBUTORS

LOS ANGELES—Plans for the distribution of Mohawk, Universal and Westinghouse refrigerators and McCray equipment have been announced by local distributing organizations.

The Electric Corp., 1050 Santee St. here, will handle the line of Mohawk refrigerators placed on the market a short time ago by All-American Mohawk Co. of North Tonawanda, N. Y.

Distribution of Westinghouse refrigerators is expected to get under way about July 15 by the local Westinghouse sales organization on San Pedro St.

The McCray and Universal lines were taken over by the recently organized W. H. Smith & Co., 1340 E. 6th St., which will distribute McCray equipment in the nine southern California counties, but will take over the entire state for Universal coolers.

The first carload of Universal coolers was received by the company during the week of June 6.

Robert Miller, formerly of the Parker Ice Machine Co., is now district manager of the Smith company.

Recent dealer appointments to handle the McCray and Universal lines are: the Gilbert Radio Shop, Pomona, and the Foothill Radio Shop, San Bernardino, also the California Products Sales Co. in the Japanese section of the city.

SEVENTY-FOUR NORGE MODELS SOLD IN CAMPAIGN

SPRINGFIELD, Mass.—Carlisle Hardware Co. in a concentrated drive on the Norge refrigerator has disposed of 74 models in six weeks. House-to-house calls were made and all sales closed from the main store downtown. Nine branch stores aided by showing models and stimulating interest.

New Orleans Music Stores Take To Refrigeration

NEW ORLEANS—Several types of electric refrigerators are being exhibited by leading music stores in this city. Out of 14 piano, radio and other kinds of musical instrument stores surveyed, eight have stocked electric refrigerators, one is cooperating with other stores on commission basis and one is contemplating the installation of a refrigerator department later in the summer.

Two of these stores, L. Gruenwald Piano Co., Inc., and C. G. Cohn, Ltd., are displaying Ice-O-Matics; three, The Philip Werlein Co., Ltd., the Music Shoppe, and Collins Piano Co., sell Leonards; The Dwyer Piano Co., and Harry B. Loeb Piano and Radio Co., carry the Majestic and the Lyric Radio Shop handles the General Electric line.

Leonards have been featured since early spring in the Werlein and Collins piano stores.

A system of distributing tags for the rear of automobiles, has been instituted by the Gruenwald Co., according to Mr. Dunn, manager of the refrigerator department, bearing the name Ice-O-Matic in large attractive lettering, which is given to the prospective customer in exchange for the customer's license number. At the end of a given period, generally three to six months, a drawing of the license numbers takes place and prizes are awarded the winners. A recent drawing was attended by 600 people.

OKLAHOMA CITY STORES TAKE DEALERSHIPS

OKLAHOMA CITY—Rorabaugh-Brown, one of the largest department stores in the Southwest, and Frederickson-Kroh, one of the oldest and largest music dealers in this area, have been signed as Majestic refrigerator dealers by the Harrison-Smith Co., distributor for Oklahoma, Panhandle of Texas and a part of New Mexico.

DES MOINES CO. ANNOUNCES WESTINGHOUSE AGENCY

DES MOINES, Iowa—The Central Electric Co. has been awarded the retail agency in Polk County for the Westinghouse line, according to S. C. McAfree, manager of the firm.

C. R. Morrow, formerly electric refrigeration sales manager for the Des Moines Electric Light Co., has been named head of the refrigerator division.

VIRGINIA CONCERN HAS DOUBLED 1930 RECORD

HARRISONBURG, Va. — Sales of Copeland refrigerators by the People's Hardware Corp., distributor here, so far this year are more than double the entire sales in 1930, according to Howard E. Mason of the Refrigeration Department.

Eight installations negotiated by the company recently are:

The Mimslyn Hotel which purchased a WA compressor and 2 Larkin coils for short order refrigerators, an XA compressor and 3 Larkin coils for a 3 compartment walk-in cooler, and a model C water cooler.

In the Rockingham Court House the company installed an LC water cooler.

E. M. Garber of New Hope, Va., had a special 6x6x6½ ft. meat storage room installed, which is cooled by a Larkin coil and model R compressor.

In the Park Cafe at Waynesboro, Va., a model 86-C with a special Larkin coil and a model W Condensing unit were placed in operation.

For Luther J. Shank of Harrisonburg, a model WA Copeland compressor and a special coil for the brine tank were installed in a milk storage cooler. Alfred Mohler of Mt. Solon, ordered a model H compressor for cooling the brine tank which was installed in his milk cooling room.

Both Judge T. N. Haas and Dr. J. R. Gambill, who operate apartment buildings, have placed orders for six model A-521 Copelands to be installed in their apartments. These units will be installed in the buildings as needed over a period of 12 months.

MOBLEY ORGANIZES COMPANY IN GEORGIA

GRIFFIN, Ga.—The Monitor Appliance Co., organized by C. F. Mobley, has joined the dealer organization of the W. D. Alexander Co., distributor in Atlanta, Ga., for General Electric refrigerators.

Mr. Mobley formerly was floor manager of the W. D. Alexander retail department. The sales department is managed by J. S. Busha.

G. E. DEALERS START RACE FOR GOVERNOR

DETROIT—General Electric refrigerator dealers and salesmen in Michigan are turning to politics in an effort to elect the first governor of the Caswell-Stull Dealer Club of Michigan in the gubernatorial race launched June 1 and which ends with the final counting of ballots on July 11.

The nominating committee, comprised of C. H. Stull, chairman, Syd Caswell, Ken Halleck, Howard Duerson and Howard Turner, have thrown the hats of 10 dealers in the territory into the ring.

Political aspirants for the office are: Frank Bloom of the Alpena Pr. Co., Alpena, known as the "Lumber Jack Ward;" Harry Brownless of the Brownless Auto Supply Co., Dearborn, the "Ford Ward;" Joe Pitcher of Pitcher & Co., Saginaw, the "Pickle Ward;" Harry Schaefer of the Schaefer Hardware Co., Ypsilanti, the "Teachers' Ward;" Burt Fletcher of the Calkuss & Fletcher Drug Co., Ann Arbor, the "Co-ed Ward;" Roy Fitzhugh of the Triangle Motor Sales, Bay City, the "Fish Ward;" Bill Hall of the Hall Electric Co., Muskegon, the "Gusher Ward;" Charles Brown, Cable Nelson Piano Co., Kalamazoo, the "Celery Ward;" Lou Gruesel, Central Electric Co., Battle Creek, the "Health Ward;" and Ro Swick, Smith-Winchester Co., Jackson, the "Prison Ward."

When the smoke of the campaign has cleared away the politician receiving the largest number of votes will be elected to office. Second and third place candidates will be Lieutenant-Governor and Secretary, respectively, while to the last placer the office of Custodian of the Courthouse Cuspidors will be bestowed.

Votes will be given for both purchases from the distributor and for actual sales from the dealers' stock. In the "Lumber Jack" ward each purchase and sale counts for 100 gubernatorial votes. The "Ford," "Pickle," "Teachers" and "Fish" wards are receiving 75 votes for each purchase and sale. In the other wards only 50 votes are being allowed for each purchase and sale.

Like every other political race, each candidate has his own camp and organization, consisting of a campaign manager, that is, his sales manager, dealers as ward bosses and retail salesmen as racketeers.

District representatives Halleck, Turner and Duerson are serving as political bosses and their task is to stir up action in each of the rival camps.

To show the progress of the campaign, Caswell-Stull publishes each week the "Scandal Sheet" giving the latest dope on each candidate. Campaign managers who contribute one editorial a week to the "Sheet" are credited with 200 votes. Al Truax is editor-in-chief of the political organ.

A silver loving cup will be awarded to the candidate elected to the office of Governor and it will remain in his possession during the term of his office.

The campaign manager of the winning candidate will receive a beautiful engraved desk set. Each ward boss in the winning ward will receive an engraved deluxe binder. Each racketeer in the winning ward will receive a General Electric cigarette lighter.

The racketeers polling the first, second and third largest number of votes for their respective nominee, regardless of whether or not they are in the winning ward, will receive the following awards:

The first leading racketeer will receive a wrist watch. The second leading racketeer will receive a brief case. The third leading racketeer will receive a Wahl pen and pencil set.

The three wards having the highest number of votes will be invited to attend a fish fry and outing at some centralized point to be determined as soon as the votes have been compiled.

BOHN PIONEERED THE PORCELAIN REFRIGERATOR

This is but one of the many advances pioneered by the BOHN engineers during thirty-five years of quality manufacturing.

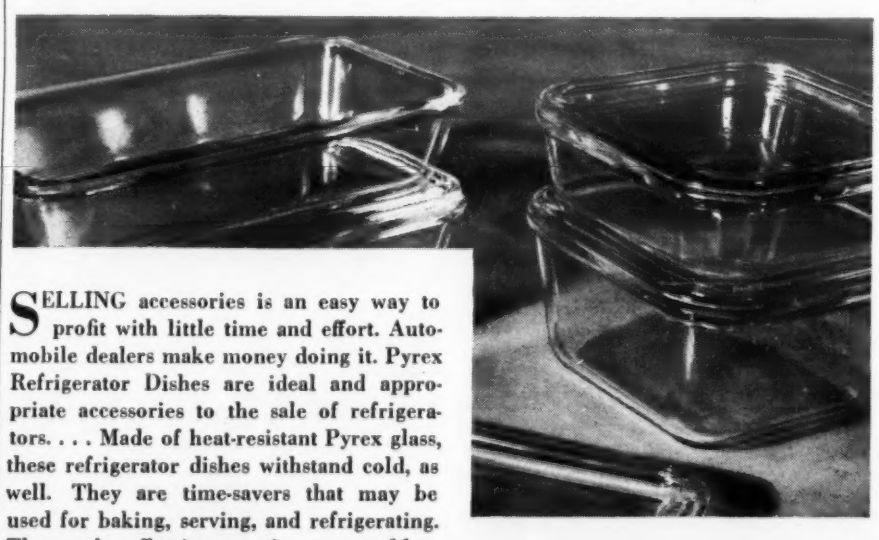
BOHN has built thousands of cabinets for manufacturers of refrigerating machines who desired the utmost in beautiful and scientific construction to best set forth their mechanism.

BOHN would be glad to figure with those organizations who recognize that a quality all-porcelain refrigerator is a distinct merchandising asset.

BOHN REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA

Write for details of low prices now prevailing on stock models

Motor dealers do it, *why not you?*



SELLING accessories is an easy way to profit with little time and effort. Automobile dealers make money doing it. Pyrex Refrigerator Dishes are ideal and appropriate accessories to the sale of refrigerators. . . . Made of heat-resistant Pyrex glass, these refrigerator dishes withstand cold, as well. They are time-savers that may be used for baking, serving, and refrigerating. They make effective premiums . . . add to the value of the refrigerator . . . help clinch the sale. . . . Pyrex Refrigerator Dishes retail for as little as 85c—set of four, $4.40. Get them from your jobber or write to Corning Glass Works, Corning, N.Y.

PYREX
REFRIGERATOR DISHES
Trade-Mark "Pyrex" Reg. U. S. Pat. Off.

Scientific and Historical Data of the Refrigeration Industry

An explanation of the principles of mechanical refrigeration and the historical background of the refrigeration industry are given in the court record of the Frigidaire-Absopure Patent Suit.

The complete proceedings of the trial, which took place at Bay City, Mich., March 18-23, 1929, are reprinted in a 48-page supplement.

The expert testimony recorded in this document furnishes a most illuminating exposition of the various refrigeration processes and a valuable picture of the historical development of the industry.

Postpaid to any address for $1.00 per copy. *Remittance must accompany order.*

Electric Refrigeration News
550 Maccabees Bldg., Detroit, Mich.

NEW PRESIDENT SEES SOLUTION OF TRADE RELATION PROBLEM

By J. F. Owens*

WE HEAR much talk these days about a world economic crisis, and it is rapidly becoming the fashion to place the responsibility for any and all of our difficulties and our failure to solve them on the existence of this crisis. It would seem as though we never had had any problems before the present serious situation settled down upon us like some great international fog, recognizing neither geographical nor national bounderies.

It seems to me that a vast amount of energy is being spent in trying to fix the blame for unemployment, over-production, under-consumption, disturbances of international trade balances, or whatever other generality we may choose to employ in describing this world-wide situation, and not quite enough in diagnosing some of our own ailments and their relation, if any, to world affairs.

I may be wrong, but it seems to me that no one is making any effort to get down to what I call the "grass roots" of our difficulties. If this is done, we will very quickly find that most of our problems which seem to be the outcome of some intangible, but nevertheless very real, world-wide economic crisis, can be resolved into one very simple problem which is not new but which, for the moment, is all dressed up in new clothes with no particular place to go, and which, therefore, is trying to go every place at once.

It is the problem of distribution which, in this country at least, is becoming more and more acute, affecting not only every man, woman and child in the United States but every man, woman and child throughout the world.

It slaps at the little general store in the country village and at the great department store in some metropolitan center. It becomes the night-mare of the retailer, wholesaler and jobber alike, creating failures, unemployment, over-production (which means more unemployment), under-consumption and all of the many ills which accompany a period such as we have been passing through.

The acuteness of this problem of distribution is due, very largely, to the rapidity with which our whole economic structure has changed in the past few decades. The problems of production created by this highly developed machine age have been solved to some extent, very largely because American industry has its 5-year, 10-year and even 15-year programs.

Distribution Problem

On the other hand, we apparently have not yet learned how to control the consequences of our machinery and our mass production. We produce the highest quality of commodities at the lowest possible unit cost and in quantities sufficient for everyone, but we just don't seem to know how to get them to the consumers in such a way that they, too, may benefit by the machine age. Hence, we are startled by this overnight growth of the problem of distribution.

Taking the department store as an example, this type of organization has found out how to buy direct in large quantities. They can not only undersell the small retailer but they place the wholesaler and jobber in a position where he wonders whether or not he is about to be eliminated from the economic picture.

They sell at a discount to their own employes, which again seriously affects the small retailer, while manufacturers generally are affected by the affairs of both wholesaler and retailer. The chain store and the small retail shop for, if it stor and the small retail shop for, if it is part of a national system, it can buy in such quantities that it frequently can offer goods to the consumer for less than its small competitor can buy them.

The situation is not peculiar to any one class of commodity, one industry, or even to American business and industry. The problem as discussed at a meeting of the International Chamber of Commerce is the same problem as discussed at some local retail dealers association or at the supper table of the worker who is out of a job.

An economic conference in Geneva conducts its discussions from a world-wide point of view, the United States Chamber of Commerce from a national point of view, the local trade association from a community point of view and the man out of a job from the point of view of a hungry family. But, nevertheless, it is one and the same problem which is being discussed in a hundred different ways and in a hundred different languages.

It is by no means my intention to indulge solely in an academic discussion of world-wide commercial and industrial economics. We, in the electrical industry, are faced with a specific problem which is just one phase of this problem of distribution and I am supposed to deal with it under the title of my talk, which the program will tell you is "Trade Relations."

But in order to discuss that portion of the problem of distribution which is properly ours, together with all of its implications, and discuss anything which may seem like a reasonable and sound solution, it has been necessary for me to call attention to the fact that it is only one small sector of a much larger national problem which, in turn, is also only a sector of a great international problem.

What is our portion of the problem? It is nothing more or less than the merchandising of electrical appliances for use in the home. It affects directly the light and power industry, the electrical manufacturer, wholesalers, jobbers, retail dealers, contractor dealers and last, but most important of all, the consumer of electric current who also provides the market for those electrical appliances.

Customer's Viewpoint

I say "most important of all" because if we do not approach this problem from the point of view of the folks in the home we will have disregarded the controlling factor in any equation we may set up for its solution.

I propose to face the issue quite frankly and say that this problem is created by the fact that the electrical wholesaler, retail dealer, and contractor dealer, sees himself and his business becoming only a forgotten page in the history of American business because of the fact that the central station is engaging in the business of merchandising and installing electrical appliances.

The business of the light and power company is to generate and distribute electric current, they say. That is what it was organized for, if you please, and it is for that purpose that the people of the state have granted it the right to engage in business. With this in mind they have frequently appealed to the courts and the state legislatures for decisions and laws prohibiting the central station from doing these things.

If this were entirely true, and if we could stop there without going any further, then there would be no problem. Unfortunately the customer of the light and power company has a curious psychology with regard to electric service which prompts him to hold the company responsible, not only for the quality of its service insofar as electric current is concerned, but also for the effective operation of the appliances which he attempts to use in his home.

If these appliances do not function properly, he is very sure that the company is sending second grade electricity over its lines and he immediately demands that something be done to make them do the work for which they were intended to do, and do it well. The company wants the appliance to work well so that it will remain on the line and continue to consume current; it cannot dodge some measure of responsibility without destroying its friendly relations with its customers.

If it could, then the same principle would apply to telephone service and the telephone company could stop with wire service, allowing the customer to buy any kind of a telephone instrument which might strike his fancy and have it installed by the nearest electrical contractor.

So, while the light and power company may not have been organized to go into the retail business of selling toasters, curling irons, vacuum cleaners, refrigerators and whatnot, this domestic equipment does present a problem which is quite as serious to the central station as the problem of central station merchandising is to individuals who have set themselves up in the business of selling and installing them.

In some communities it has been forced to go into the business by a flood of sub-standard equipment giving unsatisfactory service for which the central station has directly or indirectly been blamed. In others it has been forced into the business by local circumstances which made it impossible for local dealers to apply the market properly or properly service the equipment once it was installed.

There may be a score of reasons for central station merchandising, but among them I do not find the primary motive as being the retail profit they might enjoy from the sale of equipment. The one idea has been to get satisfactory, standard appliances on the line so that the customer would use more electricity. The central station looks upon

(*Concluded on Page 18, Column 1*)

*Address by J. F. Owens, president of the Oklahoma Gas & Electric Co., Oklahoma City, and president-elect of the N. E. L. A., before the second general session of the N. E. L. A. convention, Atlantic City.

Walter Seeger Calls on His Customers

Walter Landmesser, G. E. commercial sales manager (in the light suit), makes a wise crack about the Frigidaire water cooler. Leaning on the cooler (left), is Jack Leonard of Seeger Refrigeration Co. Behind it is John Schaefer, engineering editor of the NEWS, and Walter Seeger. The four on the right are R. B. Ambrose (Frigidaire), J. M. Fernald (Kelvinator), H. H. Bosworth (G. E.), and H. M. Kumler (G. E.). Now the scene shifts to the General Electric commercial exhibit, where Walter Landmesser is thinking up an answer to a fast one by Walter Seeger. The trio on the left are Jack Leonard, M. T. Bard and J. M. Fernald. On the right are R. B. Ambrose, H. H. Bosworth and H. M. Kumler.

The Vollrath Ventilated Vitalizer. It even revives vegetables that are partly wilted. Five convenient sizes. Note the flat covers of this and the refrigerator dishes. They stack; save space.

The VOLLRATH "VITALIZER" keeps things garden-fresh in your refrigerators

SOONER or later, every one who owns an electric refrigerator discovers the need of a vitalizer to keep fresh vegetables from drying out. The Vollrath Vitalizer supplies the demand. It is being sold more and more as part of the refrigerator equipment . . . it is being sold in astonishing quantities everywhere.

Yet not astonishing either, when you consider that the Vollrath Vitalizer is snow-white, durable, gleaming enamel. It is like an integral part of the refrigerator itself. Its moist air prevents fresh vegetables from getting limp; keeps them crisp and fresh-tasting. Proper ventilation is assured by the construction of the cover. The body itself is solid, so that puddings and other thin substances can be chilled in it on occasion.

You know that sanitation is of utmost importance in refrigeration. All Vollrath enamelware is built to stand sterilization. The surface is hard and lustrous. Each piece is vigorously tested for durability. Besides the vitalizer, consider the extra profits you can make in selling the Vollrath refrigerator jugs and dishes for any food that needs to be kept covered; also defrosting pans. All are a vital part of the sanitary equipment of the refrigerator. Send for illustrated folders. The Vollrath Company, Sheboygan, Wisconsin. Established 1874.

The Vollrath name in this form on the label assures you of genuine Vollrath Ware.

VOLLRATH WARE ★

INSTANT ACCEPTANCE

FOR THIS MODERN TRAY

Flexible Rubber Freezing Trays establish new sales record

Flexible rubber freezing trays have been available to the public only a short time. Today they have nation-wide distribution and sell rapidly everywhere.

For, ice cubes will not stick to rubber trays! This fact, with all of its unusual and convenient consequences, is featured by "Believe-It-Or-Not" Ripley in a dozen national magazines, including Vogue, Vanity Fair, Collier's, The New Yorker, National Geographic, House Beautiful, House & Garden, and others.

Cash in on this campaign. Boost your refrigerator sales with flexible rubber trays. Write for complete details either to the manufacturer of the refrigerator you sell or direct to us.

THE INLAND MANUFACTURING CO.
Dayton, Ohio

Flexo Tray
Patented and Patents Pending — Reg. U. S. Pat. Off.
ICE CUBES THE MODERN WAY

PARKER COMPRESSORS
SINCE 1899

SULPHUR and METHYL 1-6 HP to 3 HP

AMMONIA 1 HP to 50 HP

For Immediate Delivery to Manufacturers

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STOCK CARRIED AT BOTH POINTS

Owens Believes Joint Merchandising Committee Will Solve Trade Problems

(*Concluded from Page 17, Column 5*)

an appliance as a current consumer and not as a commodity which it can sell at a profit.

What is the answer? What are we going to do about it?

I have said that in the past wholesalers and retailers have sometimes appealed to the courts and sometimes to the legislatures for relief from what seemed to them like certain disaster. It is a curious thing, but many business men who have no regard for the government as a business man and resent the intrusion of government in the field of private enterprise and individual initiative, will turn almost instantly to the government for relief from business troubles or what they deem unfair competition.

It is because of this tendency that we are faced with two alternatives for a solution, and these same two alternatives apply to a solution of the entire problem of distribution in this country or any other country.

The first is legislation. Those who lean toward this solution think that by passing a lot of prohibitory laws and enforcing them they will immediately find themselves in some Utopia of prosperous business conditions without stopping to find out what effect those laws may have on other people or that if this effect is unfavorable it may prevent the very result they seek to accomplish.

In other words they are not thinking of the consumer but only of their own cash registers. They are not thinking of other groups within the community or the state, or the nation who have the same problems of distribution but only of first-at-hand means of self-preservation.

Legislation No Cure

It can be accepted as a fundamental fact that legislation never cured any business depression or economic crisis. It has never provided employment for the unemployed nor saved the insolvent from bankruptcy. It can only put food in hungry mouths by appropriations from the public purse, and the public purse is not inexhaustible even though certain types of politicians may think so.

It cannot stop the operation of the law of supply and demand any more than it can stop the operation of the law of gravitation. It can exercise its police power and protect the public from exploitation by dishonest business methods, but it cannot solve the problems of honest men engaged in honest business. When it tries to do any of these things it only succeeds in making a general mess of everything, adding to whatever distress may exist.

The second alternative is cooperation, and it is this alternative which has been selected by the various groups most vitally interested in electrical merchandising.

They have organized the Electrical Merchandising Joint Committee, members of which are on this platform with me now, and by this simple piece of machinery are already approaching the solution of a nation-wide problem and thus contributing to the only sane and sensible method of approaching the larger problems with which the people of all the world seem to be faced, namely; a way out of our economic ills which has no return lane of traffic.

The joint committee is composed of representatives of the National Retail Dry Goods Association and the National Electric Light Association. Its purpose, as stated at the time of organization, "is to consider the problem of merchandising household electric appliances from various aspects with the view of wider, more efficient and more effective distribution with the public's best interest in mind."

I wish to emphasize the last few words because upon their sincerity rests the future success or failure of the efforts of this committee. Whatever conclusion they may reach; whatever recommendations they may promulgate; whatever action they may take; all are based on that easily understandable phrase—"with the public's best interest in mind."

"Cooperation" is the keystone of this arch which the electrical industry, and in the term electrical industry I include everyone, from the smallest retail dealer to the largest manufacturer, who has anything to do with the distribution of electric current or appliances which it operates—to bridge the stream of faulty distribution which so often flows between the producer and the ultimate consumer.

It was with this fact in mind that the officers of the National Retail Dry Goods Association requested, in the first instances, a conference with executives of the light and power industry which led to the formation of the Electrical Merchandising Joint Committee.

Recognizing that our problems are mutual because they deal, after all, with the same ultimate consumer, they had but one thought in mind; their solution in the public interest.

The result has been that already this joint committee is setting up the necessary machinery to correct trade practices that do not square with ethical merchandising principles. Cooperating committes will be set up in every state and in all the major cities.

Problem for Distributors

After all, who is better fitted to solve problems of distribution than the distributor himself? If we are honest and capable men we must have, within ourselves, the best possible solution of any problems that confront us.

When, for example, there are four gasoline filling stations on some corner the needs of which could be easily taken care of by one and the ultimate consumer is burdened with four independent fixed charges and overhead operating expenses, there is something obviously wrong.

It is not only the duty of the distributor to study such a problem of distribution in the interest of the ultimate consumer but the very existence of his business depends upon a proper solution. And, by way of warning, may I say that the solution for these many problems of distribution must be found and found by the distributor himself.

If they are not, then a solution will be attempted by some outside agency which is less capable and which may be totally lacking in the experience necessary to even approach them; the resulting policies will be disastrous to the interests of both the distributor and consumer alike.

To cite an instance of a concrete problem which may very well come within the scope of this joint committee for it is a serious problem confronting all producers and distributors, is the question of taxation. Inasmuch as all taxation eventually rests on the ultimate individual consumer, tax trends affect our whole economic structure.

Today central stations are paying approximately 10 per cent of their gross incomes in taxes, which, of course, is reflected in the rates to the consumer; manufacturers of electrical appliances pay all sorts of federal, state and municipal taxes (the aggregate of which is not growing any less if we are to believe government reports and budgets) which they pass on, as far as possible, to the jobber and wholesaler; the jobber and wholesaler pays the same sort of taxes which he, too, passes on, so far as possible, to the retailer who, in turn, has his taxes, which must be added to the prices tag on his goods.

Once more I point to the fact that no one is so well fitted to deal with this problem of taxes as the distributor who has direct personal contact with the consumer. No one but a distributor of electric current could possibly understand how a production tax of, say 2 mills per kilowatt hour, could possibly affect the bill of the average consumer, who, I remind you once more, provides the market for electrical appliances.

The average domestic consumer in the United States uses 550 kilowatt hours a year and 2 mills would make a difference of less than 10 cents a month on this average bill, an amount which would not be worth the time of calculating on the majority of bills.

But it may easily be a very serious matter to the average domestic consumer and, as five states have already passed such legislation, I propose to explain why. Such a production tax, no matter how small, must affect the cost of industrial or wholesale electricity.

Effect of Production Tax

At present, as everyone knows, the margin between what the central station can charge for wholesale electricity and the cost of the same amount of electricity to the manufacturer who installs his own generating plant, is very narrow. A slight production tax may wipe this margin out entirely.

Now, while there is little profit in wholesale electricity, it does absorb a very considerable portion of the fixed charges of the central generating station because much of it is furnished during off-peak hours.

Anything which may have a tendency to drive the wholesale consumer to the expediency of generating his own power has a tendency to eliminate this absorbant of fixed charges from the picture and add them to the domestic consumer's bill.

Thus any tendency to add a production tax to the light and power industry, which is already over-burdened with taxes, may easily affect the sale of appliances by placing the cost of operating them beyond the reach of the pocketbook of our average consumer.

It therefore becomes a problem of both the distributor of electric current and the distributor of electric appliances as well as the domestic consumer.

There is another interesting and most important application of the cooperative machinery which this joint committee is providing for and this is the manner in which it might easily be utilized in the elimination of wastes all along the line from the manufacture of appliances to their use in the homes of consumers.

Certainly the distributor, whether the distributor be a central station, a contractor-dealer or a department store, has the best opportunity to gauge accurately the probable needs in his field and to estimate the number and quantity of each appliance which it will absorb within a given period of say, 12 months.

This information would be invaluable to the manufacturer, assisting him, as it would assist him, in planning his stocks of raw materials and parts; eliminating an unnecessarily high inventory in order to be prepared for unforeseen demands; and level out his processes of manufacture so that they are no longer marked by seasonal characteristics; all of which means the reduction of costs borne by the consumer.

There is no reason why this information cannot be easily made available to the manufacturer and it most certainly comes within the scope of the Electrical Merchandising Joint Committee and the machinery of the allied organizations which it represents.

It sounds simple enough when one comes to think of it. The electric light and power industry, vitally interested as it is in the quality of the equipment which is attached to its lines and knowing that after once this equipment is installed it will be called upon for service and will in effect be held responsible by the customer for its proper operation, might have, if it were sufficiently short-sighted, solved the problem long ago insofar as its immediate interests are concerned.

With its financial resources and its lack of interest in merchandising as a profit producer, as well as with its immediate contact with the consumer, it might have plunged into a merchandising war with everybody engaged in the retailing of appliances and driven them from the field in a very short time.

Had it done so it would have shown a deplorable lack of interest in the ultimate consumer and in the community, for such action would have affected the prosperity of more than one group of people and anything which affects the prosperity of one or more groups affects the prosperity of the community as a whole.

Incidentally, it would have been a very foolish policy, for the welfare of the public utilities is bound up with the welfare of every single group in the community served.

Complete Electric Service

It must always be remembered that complete electric service on the part of the light and power company does not stop with the delivery of electric current at the customer's meter in his cellar. The company has a very important obligation in addition, which is to point the way to the multitude of uses for that current.

The customer looks upon us as specialists and he expects us to tell him just how he can take advantage of these kilowatt hours, electrical servants, which we place within his home and put them to work for the comfort and convenience of himself and his family.

So all of the groups, including the central stations, have gotten together to solve a mutual problem and with a common objective, the welfare of their customers, the conservation of which means the conservation of their own welfare. The problem becomes no longer a problem but a question of agreement on procedure; not a very difficult matter when men are sensible.

If the electrical industry can compose its difficulties in the interests of all groups and of the public, without the aid of politicians and a variety of radical agitators, why cannot this whole national economic problem of distribution be solved in exactly the same way?

There is no excuse for over-production or for under-consumption in this country for we can very easily consume all we produce, once we get this troublesome matter of distribution behind us and have learned how to control the consequences of our rapid advancement in the art and science of production.

Just as long as people need and want the things that manufacturers may and can produce there is no such thing as over-production. There is, however, the one problem, how can we get the manufacturer's product to the ultimate consumer in the quickest, cheapest and shortest way?

A prominent economist, Sir Ernest Benn, once said that wealth is exchange. This is true. All the raw materials in the world combined with unlimited machinery of production will not produce wealth without the medium of exchange, and the processes of exchange are the processes of distribution.

If the processes of distribution are faulty there can be no wealth and much of the world-wide trouble of today is due to faulty distribution. Eliminate those faults by conference and agreement among industrial leaders, public service executives, representatives of finance and outstanding business men, and most of our economic ills will disappear.

Then government can wend its peaceful way attending strictly to the business of governing, undisturbed by demands for specifics and cure-alls for the many ills which man seems to be heir to.

It may very well be that the situation within our own industry provides an opportunity for leadership in a movement which may ultimately be expanded in a nation-wide movement throughout all industry to set up the necessary machinery for the solution of all problems of distribution, eliminating wastes and reducing the cost to the final user of the products of industry.

I need not elaborate on the possibilities of such a procedure. In our own case it must result in the more complete utilization of electrical appliances as well as a larger employment of electric service.

Taking the broader viewpoint, it means the solution of the one great and as yet unsolved problem in our economic structure, the problem of bridging the gap between the producer and the consumer of his product.

Announcing a New

Cleaning and Polishing Compound

for Electric Refrigerators

"BROZA" MINERAL CREAM

This new compound is the ideal cleanser and polishing agent for inside and outside refrigerator surfaces. Works equally well on porcelain enamel, lacquer or duco finishes. Easily and quickly applied. Already endorsed by Home Economics departments of leading manufacturers and distributor organizations.

Send for Free Sample and Plan for getting leads to New Refrigerator Prospects

USE THIS COUPON

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Gentlemen: Kindly send liberal free sample of "Broza" Mineral Cream and your plan for getting names of new refrigeration prospects.

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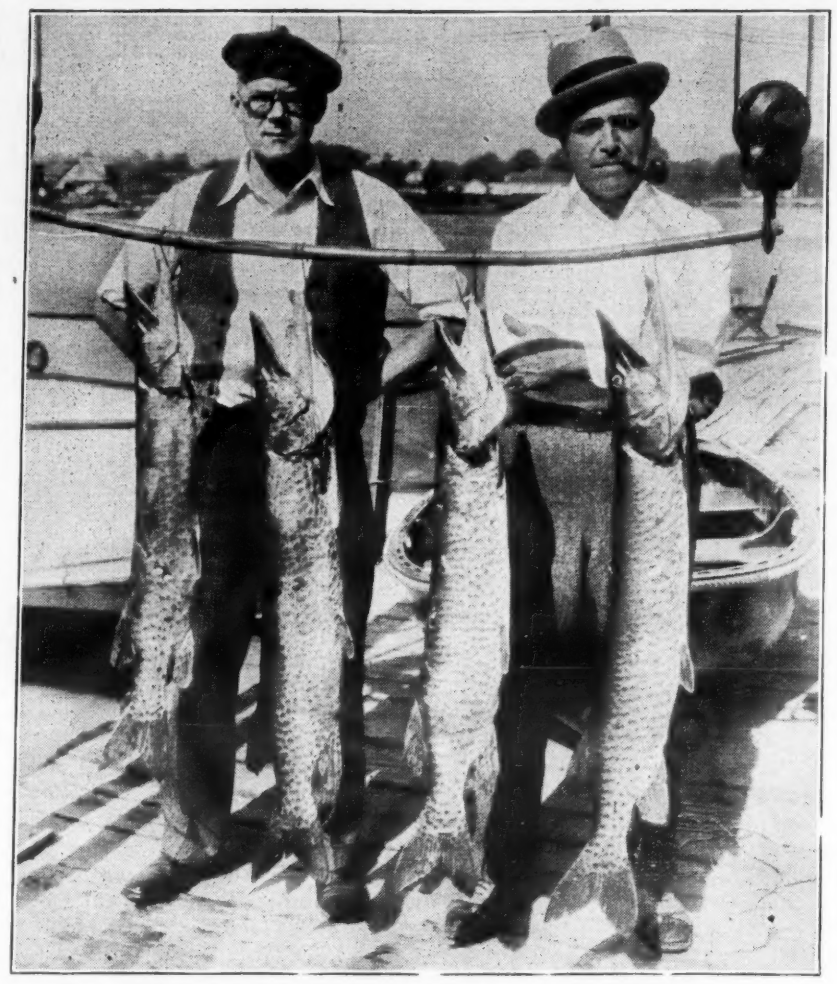
Ruthenburg, Hughes Land Big Ones



Edward Hughes, vice president (left), and Louis Ruthenburg, president of Copeland Products, Inc., exhibit one evening's catch.

COPELAND OFFICIALS CATCH FOUR MUSKIES

MT. CLEMENS, Mich.—Four muskies from 35 to 45 inches long and weighing from 10½ to 22 lbs. were the net result of a recent overnight fishing trip on Lake St. Clair by Louis Ruthenburg, president, and Edward Hughes, vice president of Copeland Products, Inc.

"We left the office at about a quarter to six," said Mr. Hughes, "and stopped on the way to buy some food to eat that night and the next morning. We caught three of the big fellows that same evening, and the next morning, before returning to work, we caught the largest one.

"We caught the fish while trolling behind Mr. Ruthenburg's cabin cruiser, named the 'Kingfish of Mount Clemens.'

"Just before we came in I got a strike and started playing a muskie and yelled to Mr. Ruthenburg to get his line out of the way as I had a big fellow on the hook. He started pulling in his line and another big one hit his bait.

"We had some time for about 10 or 15 minutes keeping the lines from getting all tangled up, when Mr. Ruthenburg's fish got away. By the time I got mine to the edge of the boat my forearm had tired so badly that I relaxed my hold for only an instant. The big boy gave a flip and threw the hook about 30 ft. and he was gone, too.

"However, neither of us cussed our luck, for we had four big ones and that was good enough for anyone in a single night out.

"The next to the biggest fish was a particularly mean one. He would start on a long run and I nearly burned my thumb off braking the reel to keep the line at the right tension. I had to scoop water up with the other hand to keep my thumb from burning off.

"We spent the night on the boat and cooked our own meals. We were up at four o'clock the next morning and had bacon and eggs for breakfast and were out before daylight. That was when we caught the biggest fish and lost two other big ones."

MERIDEN BUREAU FORMED BY DEALERS

MERIDEN, Conn.—Seven Meriden refrigerator dealers have formed an electric refrigeration bureau under the National Electric Light Association.

The dealers who organized the bureau are: E. J. Burke (Westinghouse); Connecticut Electric Equipment Co. (Frigidaire); Connecticut Light & Power Co. (General Electric); Clarence H. Kimmel (Servel); Modern Utilities (Wayne); L. W. Reynolds (Kelvinator); and the Uptown Radio Sales & Service (Copeland).

BRITISH EDITION OF 'LOW PRESSURE SELLING' PLANNED

BLOOMINGTON, Ill. — Arrangements for publication of a British edition of "Low Pressure Selling" have been completed by an English publishing house with J. A. Worsham, the author.

Mr. Worsham is sectional sales manager for the Williams Oil-O-Matic Heating Corp. of this city.

INDIANAPOLIS STORE BECOMES COPELAND DISTRIBUTOR

INDIANAPOLIS — The William H. Block Co., one of the largest department stores in this city, has become Copeland distributor, it was announced recently by W. D. McElhinny, vice president of Copeland Sales Co.

The new department will be under the direction of F. O. Harris.

THORPE PRESCRIBES HARD WORK FORMULA

ATLANTIC CITY, N. J.—"There is no short cut to general business recovery; only a long road for individual effort, sweat and sacrifice," declared Merle Thorpe, editor of *Nation's Business*, before the 54th N. E. L. A. convention, at the Thursday session.

"There have been no less than 1,000 remedies prescribed for the delayed business recovery," said Mr. Thorpe. "A review of all remedies leaves one clear impression; most of us are seeking a short-cut, an easy formula, usually legislative, that will restore general business.

"Too few include in the prescription, mental and physical exercise, along with the pill. We are agreed that the golden years of '28 and '29 are denied us. We resent the idea that to get them back we must, with sweat and sacrifice, bring them back.

"Another illusion: Too many of us are watching and waiting for general business to appear and dispense increased business activity to each individual," he said. "We forget that general business is simply the sum total of all businesses.

"It is made up of, not the big boys on the stock exchanges, but the 447,000 smaller corporations and the five million firms, partnerships, and one man shops of the country. They constitute the real business structure of the United States.

Looking for Magician

"The individual business man is looking for a magician to pull a rabbit out of a hat. If he would start in tomorrow morning to increase his own particular business activity, to be content to build a brick at a time on what he now has, why, in 60 days the country would feel the stimulus, and in six months old general business would come galloping down main street announcing restored and normal business activity.

"It is not a question of general business coming back, it is a question of bringing it back.

"Why is the individual hesitant? He has come to distrust the recommendations as to the part government can play in our economic life. His confidence is destroyed, confidence after all is the keystone of barter and trade.

"Nine out of ten of the million daily business transactions in this country are conducted on credit. Credit is confidence. Hesitation, fear, depression of spirit are destructive of confidence. Delay one credit transaction out of the nine and we have a 10 per cent decrease in the exchange of goods and services."

Mr. Thorpe declared: "Political panaceas in the business field, the world over, have contributed to this hesitation and fear. Great Britain with her experiments with rubber and the dole; Brazil with copper; Japan with silk; Cuba with sugar; Russia with wheat and lumber; our own government with farm products, all brought about an artificial condition, which made trade more hazardous and impaired confidence.

Political Kibitizers

"Today, in spite of this experience, political kibitzers, looking over the shoulder of every industry, suggesting plays, criticizing moves of the real participants, adds to the confusion. Threats of making those suggestions the law of the land, adds to the hesitation.

"Each development, which causes any business, large or small, to curtail its normal activities, is reflected through the entire business structure.

"Let me illustrate from the experience of the electrical industry," said Mr. Thorpe. "Eighteen months ago the two thousand companies constituting your membership committed themselves to expend a billion dollars during 1930 in order to help stabilize business conditions.

"That billion dollars gave work to hundreds of thousands of men who produced the things you use in your production program. It gave work to the copper miner, to the steel worker, to the lumber man, and to mechanics in a hundred different fields.

"Has there been political cooperation with you in the meantime? Well, hardly so you could notice it. Only a presidential veto prevented governmental competition with your business; in practically every state an additional burden of taxation was imposed; in 14 states legislative threats in the form of bills were made against your merchandising operations, two states making such bills law.

Political Threats

"One state, to use an extreme case, went so far as to propose that food, clothes, shelter as well as electric service should be supplied at government expense. Scarcely a day has passed that some political threat has not been made against your industry."

In conclusion, Mr. Thorpe said: "We are in danger of losing the economic freedom of the individual. It is a danger that cannot be overcome by marching soldiers. It is an intangible, subtle, seductive movement, which by slowly whittling away our economic freedom, is likewise diminishing our political freedom."

Majestic's First N.E.L.A. Exhibit

The center of attraction at Majestic's first showing at a N. E. L. A. convention was a cutaway model, which enabled visitors to inspect the innate working of the machine. As can be seen in the photograph, Majestic had a large force on duty at the booth. Recipe books were distributed by the young men dressed as bell hops.

"Sales Programs Should Encourage Dealer Cooperation" - Sampsell

ATLANTIC CITY—"A monopoly of the right to generate and distribute electricity in any given territory does not and should not carry with it the right to monopolize the appliance business," Marshall E. Sampsell, president of the Central Illinois Public Service Co., and vice president of the N. E. L. A., told the second general session of the N. E. L. A. convention, Wednesday morning, June 10.

"Sales programs of central station companies should be built around the idea of encouraging and assisting other vendors of electric consuming devices," he went on.

"This spirit of group teamwork should have and has had the approval and support of the manufacturers, dealers, and others within the industry. It should have and (when thoroughly understood), undoubtedly will have the approval and support of department stores, furniture and hardware dealers, and other retail outlets.

"We of the electrical industry have long been aware of the value of cooperation. We have realized the problems of each branch of our industry differ in kind and degree from those of the others.

"The fact that our light and power companies must rely for their right to do business in any given locality on municipal franchise and other privileges and are subject to regulation by state authority in respect to the general conduct of their business, often makes it extremely difficult for that branch of the industry to conduct their affairs as independently as would otherwise be possible.

"Indeed, they have found it impracticable, at times, to do full justice to what they conceived to be their responsibilities, and at the same time be proportionately helpful to others whose work, properly done, redounds to our common benefit.

"Few of us have perhaps ever seriously attempted to form a mental picture of the electrical industry in its entirety. What are the spokes within the electrical wheel, and which spoke is the most important?

"Central station people are perhaps too apt to casually conclude the generation and distribution of energy to be the all-important spoke in the electrical wheel.

"The manufacturers of electrical equipment, on whose successful research and development work the electrical industry must depend, quite naturally and properly see another equally essential spoke in the electrical wheel.

"The contractor-dealers rightly consider themselves an admittedly indispensable spoke in the electrical wheel

"To these important spokes must be added the electrical supply jobbers whose activities have always had a stimulating influence in the industry.

"Each of these 'spokes' within the electrical wheel is represented by a well-organized association, conscious of its rights, desirous of protecting its interests, and yet willing to work in harmony of thought and action for the advancement of coordinated industry purposes

"The electrical industry has been especially assisted by the trade papers. Their influence, both within and outside the industry, has been of special value to all concerned.

"Willingness to work in harmony for the development of the electrical industry is one thing. The fulfillment of that good intention is quite another. How difficult of accomplishment any joint industry undertaking really is can be somewhat appreciated, when we stop to recall that over 1,000,000 men and women are actively engaged in faithfully meeting the increasing demands of the public upon the industry.

"A most casual generalization of the total investment involved, gross amount of business done, salaries and wages paid, easily serves to clearly convince any student of affairs of the difficulties involved in agreeing upon and working out plans that appeal to each branch of our industry as susceptible of being put into effect, with advantage to all.

"We of the electrical industry know that the demand of other industries for an increasing part of the consumer's spending margin is becoming everywhere most persistent through numerous forms of carefully prepared advertising and publicity.

"If the industry is to retain its en viable reputation as an agency for national promotional activities, it must take full advantage of cooperative planning and mass selling action.

"To do this there must be worked out definite sales plans, rather than make shift selling attempts, and these plans must have the stimulus of national background to supplement, but not be a substitute for, intensive aggressive local selling efforts carried on throughout the country by local representatives of all branches of the electrical industry.

"To accomplish this we must bring about, through cooperative teamwork between all branches of our industry national and local surveys to ascertain useful and convincing information on which we can safely build future selling programs.

"Too much emphasis, it seems to me has recently been put on the question of who shall and shall not share the fruits of commercial development of the electrical industry, and on the extent to which each branch of our industry is entitled to the business, if at all

"We are apparently losing sight of the fact that, while much has heretofore been accomplished,—as is clearly evidenced by the aggregate use of electrical energy in this country compared with that of the balance of the world—the job of complete electrification of industry generally and of the homes of America, both city and rural, is only just begun."

WILLIAMS EXPORT HEAD TO VISIT FOREIGN OUTLETS

BLOOMINGTON, Ill.—A. T. Simmons export manager for the Williams Oil-O Matic Heating Corp., will sail soon for South America. He expects to leave Bloomington about June 17.

Mr. Simmons will sail on the Munson Liner "American Legion" and he will contact representatives in Bermuda Brazil, Uruguay, Chile, Panama and intermediate points. The trip will require three months.

COMPANY PLACES CLEANING COMPOUND ON MARKET

EGG HARBOR CITY, N. J.—A new cleansing and polishing compound known as "Broza" mineral cream, for interiors and exteriors of refrigerators is being marketed by the Lumo Corp. of this city.

The mineral cream is packed in one and 10-lb. tins.

SPOKANE COMPANY TAKES DISTRIBUTORSHIP

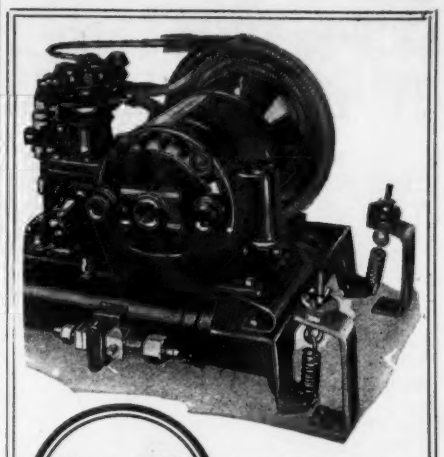
SPOKANE, Wash.—The Copeland Interstate Sales Co. is now distributor for the eastern half of Washington, the western half of Montana and the northern part of Idaho.

G. R. Boomer, president of the Interstate Bond and Mortgage Co., is general manager of the new company.

COLD-SPOT REFRIGERATORS GO ON SALE IN SHREVEPORT

SHREVEPORT, La.—Distribution of the Cold-Spot electric refrigerator is being handled in Shreveport territory by Feibleman's-Sears-Roebuck, local department store.

Feibleman's-Sears-Roebuck is a consolidation of Feibleman's Department tore with the Sears-Roebuck organization some months ago.



"M&E" EFFICIENT LONG LIFE COMPRESSORS

Now Available For

ASSEMBLERS

Thoroly approved apparatus with a long record of success in thousands of outstanding commercial and domestic installations.

The type of equipment that will assist greatly in building prestige and profit for private trademark assemblers.

Capacities 100 to 1300 lb., I. M. C.

Sold with or without controls.

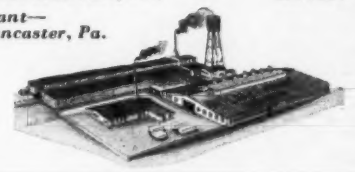
Prompt Delivery!

Write for Data Sheets and New Low Price List

MERCHANT & EVANS CO.

PHILADELPHIA, PA. Est. 1866

Plant—Lancaster, Pa.



Why

Universal Coolers sell readily- and stay sold

Universal cabinet No. LP-5. A 5 cu. ft. self-contained model

THERE are a number of excellent reasons for the ever-increasing popularity of the Universal Line of self-contained household cabinets. Their reputation for economy is backed by over nine years of splendid trouble-free performance—their high quality is at once apparent since they possess every desirable feature, including the Refresh-O-Pan, cold regulator, porcelain interior, massive chromium-plated hardware, one rubber tray and five-inch legs—and last, but not least, they retail at unusually attractive prices.

Complete information upon request

Universal Cooler Corporation

Detroit, Mich. - - - Windsor, Ontario, Canada

COOPERATION NEEDED BY BUREAU--ALLISON

By George W. Allison*
Refrigeration Manager, N. E. L. A.

THERE are three major considerations of the field activities of the Electric Refrigeration Bureau. They are: Time, cooperation and results.

Time

March 28, less than 90 days ago, the Electric Refrigeration Bureau made its opening bow to the public. This formal introduction was made through the medium of a double-page spread ad in *The Saturday Evening Post*.

The sale of a million electric refrigerators at this time is no small undertaking. The organization and coordination of all factors involved in such an undertaking is an even larger task. Time is an important factor. Ninety days is a short length of time.

Organization is essential to the success of any undertaking. The success of the Electric Refrigeration Bureau will be determined by the organized field activities. The carrying out of our plans depends upon a thorough understanding of those plans by all interests involved, and the coordination of these interests into effective operating units.

Let us first consider the many factors involved in this undertaking. There are approximately 75 manufacturers of electric refrigerators. These 75 manufacturers have hundreds of distributors, and thousands of dealers.

These dealer groups represent a varied assortment of retail outlets. They include department stores, furniture stores, hardware stores, music stores, plumbers, mail order houses, electrical contractors, electrical dealers, appliance specialty dealers and central stations.

There are about 20,000 communities served with electric current. These 20,000 communities are served by 4,000 individual companies. We have about 18,000 communities served by commercial companies.

The report of the Bureau of Census shows that there are 16,598 incorporated cities and towns in this country; 1,833 of these are 5,000 population and over.

If we succeed in organizing and coordinating these factors into effective working units, we will do far more than just sell 1,000,000 electric refrigerators We will stabilize an industry. We will bring about workable understandings among concerned groups. We will take one long step toward sound and promising merchandising principles and practices.

Cooperation

From the very beginning there has been evident a splendid spirit of cooperation. Busy executives have given their time on committees and in field organization. The manufacturers dramatically supported our opening bow to the public by cooperating with us in a 10-page section in *The Saturday Evening Post*, March 28.

In addition, these manufacturers have issued special instructions to their distributors and dealers outlining in detail activities designed to tie-in with the national program. The field forces of these manufacturers have also cooperated in arranging meetings and preparing programs in which the presentation of the Electric Refrigeration Bureau activity was included.

Although we were delayed in distributing our plan book, manufacturers, distributors, dealers and power companies have shown outstanding evidence of interest and cooperation. Interest in the activity has been expressed by every classification of dealer.

Because of the delay in arranging our national program, many of the power companies had set up their plans for their spring electric refrigeration campaigns. In practically all instances these plans have been revised so as to tie-in with our national program.

Electrical leagues have rendered splendid assistance in organizing and carrying on the activities in many of the larger cities.

Results

The Electric Refrigeration Bureau has spread to all sections of the country It is impossible at this time to give a full report of this activity. Our organization is not yet complete. Additional bureaus are being organized. From reports which we have received, there are more than 400 organized bureaus and 8,586 active communities.

Experience in the field has proved that it is not practical to organize bureaus in towns under 5,000 population In some instances in congested areas it has proved inadvisable to form bureaus in some towns 5,000 and over.

A word of explanation is necessary to clarify the relationship of bureaus to active communities. In the state of Rhode Island, there is one bureau located at Providence. This bureau was formed in conjunction with and under the direction of the Electrical League of Rhode Island. The electric refrigeration activity for the entire state is directed from Providence.

In the north central division where towns are small and widely scattered, we have one organized bureau covering the electric refrigeration activity in 58 towns. A similar situation exists in the northwestern division, where five organized bureaus cover the entire activity of a state.

A divisional breakdown of the figures covering the national activity reveals the following accomplishment:

Division	Organized Bureaus	Active Cities
New England	79	933
Eastern	46	1,282
East Central	50	620
South Eastern	50	926
Great Lakes	85	2,071
North Central	6	379
Middle West	31	941
Rocky Mountain	13	116
South Western	32	231
Pacific	12	409
North Western	30	152
Canadian	3	449
Porto Rico	..	77
Totals	405	8,586

It is impossible even to approximate the vast number of people reached through this cooperative activity. Four and one-half millions of magazine subscribers are contacted regularly through national advertising. The estimated number of persons who read each issue of the magazines in which ads appear exceeds 16,000,000. A much larger number are reached through newspaper advertising. Electric refrigeration advertising and publicity during this spring activity has commanded a large amount of space. Entire sections in great city dailies with wide rural circulation from Maine to California have featured this activity.

Promotion

Then there are radio broadcasting, outdoor posting, electric refrigeration exhibits, truck banners, tire covers, window displays, envelope stuffers and movie slides. All of these in addition to the tremendous advertising programs of the various manufacturers.

Taking all of these activities into consideration, there will be spent this year by all electric refrigeration interests, about $25,000,000. This will have a decided affect upon the public. It will also prove a positive stimulus to all sales organizations. It is bound to produce great results in sales. This tremendous volume of sales will have a direct bearing in helping to correct the present economic conditions. Certainly a program of this character expresses both faith and courage.

Electric Refrigeration Exhibits

There have been held this spring 79 large electric refrigeration exhibits. Many smaller exhibits have been staged in outlying territories. For example the Pacific Gas and Electric Co. cooperated in a large electric refrigeration show in San Francisco. This activity on a smaller scale was duplicated in 75 of their stores.

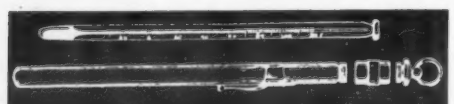
These exhibits have attracted thousands of visitors. They have been unique in their presentation. Two electric refrigeration shows featured an Antarctic exhibit. A member of Admiral Richard Byrd's antarctic expedition spoke at the opening of the exhibition. He also contributed the trophies gathered during the antarctic expedition for a most interesting display.

Manufacturers, distributors, dealers and power companies have enthusiastically cooperated in these shows. At St. Louis the Union Light and Power Co., with 10 distributors and 146 stores, conducted a large exhibit. An 18-foot ice cube man featured the exhibit. Ten refrigerators were given away as prizes for the best essay on why everyone should "Invest in an Electric Refrigerator."

Our commercial national section has published as a special report on the Electric Refrigeration Bureau, a booklet, "Cooperative Electric Refrigeration Exhibits." The purpose of this booklet is to furnish detailed information for organizing, arranging and conducting electric refrigeration exhibits.

It is hoped that a greatly increased number of these exhibits will mark the opening of our Fall activity, which is scheduled to begin September 7. Too much time cannot be given in planning the details of these exhibits. With the continued and augmented cooperation during this fall sales drive, "Refrigeration Week" will do much to educate the public on the need of adequate year-round refrigeration, and will give a splendid impetus for the Christmas sales fest.

*Speech before the commercial section of the N. E. L. A. convention, Wednesday afternoon, June 10.

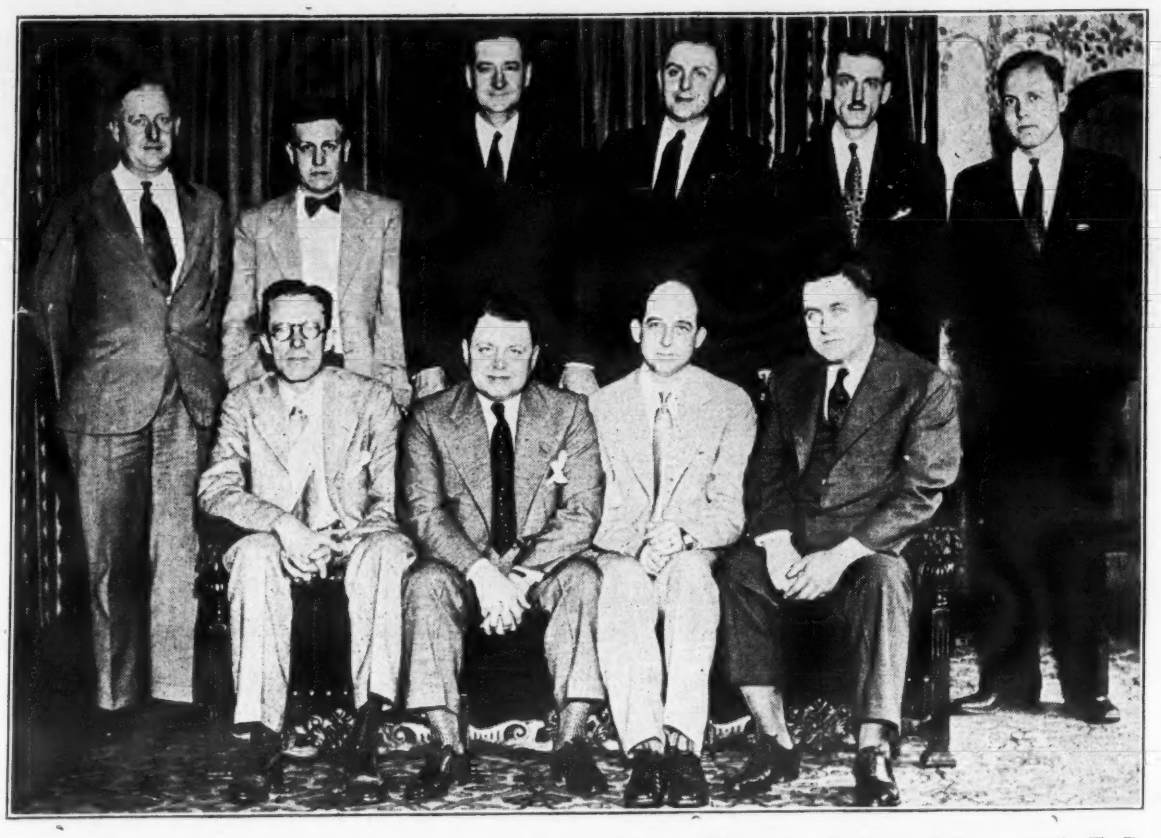


A clear view easy reading thermometer —designed to give the utmost in instrument accuracy and dependability.

Easily interchangeable refill. Nickel plated brass case, not affected by brine.

Carroll Glass Instrument Co.

Norge Officials Confer with Distributors



Norge officials and distributors at the recent meeting held at Memphis. Left to right—seated: T. P. Hallock, Norge district manager; John H. Knapp, Norge vice president; Wheless Gambill, Jr., Gambill Distributing Corp., Memphis; Harry Terry, Cramer-Krasselt Co. Standing: E. E. Hyde, Braid Electric Co., Birmingham; Frank B. Nowlin, Braid Electric Co., Knoxville; R. E. Caldwell, Cramer-Krasselt Co.; W. J. Schnelle, Texas Radio Sales Co., Dallas; H. L. Gunn, Gunn Distributing Co., Little Rock, and Ben S. Gambill, Braid Electric Co., Nashville.

WILLIAMS, MOHAWK INVADE BALTIMORE

BALTIMORE, Md. — The Tri-State Distributors, 333 St. Paul St., distributors for the Lyric radio, have been appointed distributors in Maryland and District of Columbia for the Mohawk electric refrigerator. The company is headed by Charles L. Toor, who was formerly connected with the Penn-Cliff Service Co., and Samuel L. LaPidus. This is the first venture of the concern into the electric refrigeration field.

Redding Radio, Inc., 1726 North Charles St., has been appointed distributor for Williams Ice-O-Matic electric refrigerator. The company also distributes radios, washing machines and electric appliances. Emmett M. Redding is president.

With the appointment of these two new distributors the number of electric refrigerator distributors in this section has been increased to 11. The distributors and lines they are handling are as follows:

Frigidaire Sales Corp., Candler Bldg., (Frigidaire), a factory branch; the Hines Co., 521 North Howard St. (General Electric); Consolidated Gas, Light & Electric Power Co., Lexington Bldg. (Kelvinator); Eisenbrandt Radio Co., Paca and Pratt Sts. (Majestic); Joseph M. Zamoiski Co., 111 West Redwood St. (Servel); Lincoln Sales Co., 1130 Cathedral St. (Welsbach), also plan to take on the Crosley when it is placed on the market; Parks & Hull, Inc., 1035 Cathedral St. (Westinghouse); Columbia Wholesalers, Inc., 32 South Paca St. (Norge); Eastern Hardware & Supply Co., 39 South Charles St. (Copeland); Redding Radio, Inc., 1726 North Charles St. (Williams Ice-O-Matic), and Tri-State Distributors, 333 St. Paul St. (Mohawk).

The following attended the Radio Manufacturers Show at Chicago: Cal J. Zamoiski, president of Joseph M. Zamoiski; L. L. Andrews, president, Columbia Wholesalers, Inc.; Emmett M. Redding, president, Redding Radio Co.; S. Gordon Parks, president, Parks & Hull, Inc.; Charles L. Toor and Samuel L. LaPidus, heads of Tri-State Distributors; R. P. Deubell, and H. S. Eisenbrandt, executive heads, Eisenbrandt Radio, Inc., and C. T. Farner, president, Eastern Hardware & Supply Co.

CONVENTIONEERS WITNESS TRICKS WITH ELECTRONICS

ATLANTIC CITY—Larry Hawkins, of the General Electric research laboratories, entertained the opening session of the N. E. L. A. convention here June 9 with a number of visual tricks with electronics in his demonstration, "Energy Through Space."

Those present heard radium rays popping like machine guns when he showed how the Geiger counter is used to make audible the explosion of atoms or radioactive material. This was followed by a demonstration of a photo-electric tube controlling a 1,000 watt lamp.

He presented to his audience a supersensitive tube exactly like one installed in the Mt. Wilson Observatory in California, where it is used for photometric readings on very faint stars. This tube is capable of detecting one hundredth of a millionth of a billionth of an ampere.

A minute amount of light on one side of the auditorium was picked up on the other side and amplified to work an indicator large enough for everyone in the hall to see. Following this he used a faint pulsating light beam to carry sound across a considerable part of the auditorium.

Frozen light was demonstrated by means of materials which had been previously subjected to cathode rays and kept immersed in liquid air until the time of demonstration. As these warmed up they glowed with light. High frequency oscillation, such as is used experimentally to produce artificial fever, was shown, as were several other effects, including the popping of corn between cold electrodes.

32 WESTINGHOUSE DEALERS NAMED NEAR PHILADELPHIA

PHILADELPHIA — New dealers recently appointed by the Westinghouse Electric Supply Co. of this city are: H. O. Bruner, Bristol, Pa.; L. H. Caskey, Martinsburg, W. Va.; C. C. Carty, Frederick, Md.; Culpeper Maytag Co., Culpeper, Va.; Geo. T. Custer, Bridgeton, N. J.; C. Olin Dorsch, Onancock, Va.; L. W. Gunby, Salisbury, Md.; Hitt & Brown, Inc., Norfolk, Va.; Home Supply Store, Covington, Va.

Lueken's Electric Store, Reading, Pa.; James R. Leinbach, Wernersville, Pa.; W. E. Lednum, Easton, Md.; C. L. McCabe & Co.; Selbyville, Del.; Chas. W. Miller, Boyertown, Pa.; McKenney & Price, Centreville, Md.; James Potts, Birdsboro, Pa.; L. G. Powell, Robesonia, Pa.; The Purnell Co., Berlin, Md.; Reid & Cutshall, Roanoke, Va.

Reppert Electric Co., Sinking Spring, Pa.; Reiner Radio & Elec. Store, Tower City, Pa.; Radio & Electric Service Co., Denton, Md.; James Stump & Co., Reading, Pa.; Showers Brothers, Bernville, Pa.; Stitzer & Waldman, W. Reading, Pa.; John S. Solenberger & Co., Winchester, Va.; Thomas Hardware & Furniture Co., Lawrenceville, Va.; Clifton W. Whitmore, Lynchburg, Va.; Weidner & Nuss, Reading, Pa.; C. F. Werner, Shillington, Pa.; William Heffner, Laureldale, Pa.; R. W. Miller, Reading, Pa.

NEW ORLEANS RADIO CO. OPENS REFRIGERATION DEPARTMENT

NEW ORLEANS—The General Radio Corp., retailer of General Motors radios here for the last year, has opened a refrigerator department for handling Frigidaires.

George M. Macheca is president of the company. He was formerly with the R. D. Pitard Hardware Co., in which firm he still retains the post of treasurer.

HOEFLE TAKES MEMPHIS POST

MEMPHIS, Tenn.—E. M. Hoefle has arrived here to assume management of the Kelvinator department of J. E. Dilworth Co., 345 S. Front St., distributor in this section of Tennessee. He was formerly of Rochester, N. Y.

COAST DISTRIBUTOR VISITS COPELAND EXECUTIVES AT FACTORY

MT. CLEMENS, Mich.—E. O. Thomas, president of the Thor-Pacific Co., Los Angeles, distributor for Copeland in California, Arizona and western Nevada, made the trip from the coast to this city recently via air and rail.

Mr. Thomas' trip to the factory was made in connection with plans for expanding Copeland sales in the Pacific coast territory.

ANDREWS SELLS SIXTEEN KELVINATORS

NASHUA, N. H.—Sixteen Kelvinators sold by C. A. Andrews of the Public Service Co. of New Hampshire are now operating in the Auburn and Aller apartments in this city.

TODAY'S RESULTS
TO YOU
MUST BE PROFITABLE

At no time in the past twenty years of history of Electrical Refrigeration Merchandising have such liberal and attractive policies been available until the advent of

KULAIR

which created entirely new standards of Distribution, Quality, Price and Capacity in the Sulphur Dioxide and Methyl Chloride field, with all sizes of Compressors and Condensing Units. Important enhancement of enthusiasm and establishment of retail customer confidence in KULAIR clientele selling over private brand names will apply to your establishment with an efficient and cumulative profit result.

IT IS FOR YOU TO PUT THIS PLAN TO WORK TODAY

Write to

KULAIR CORPORATION PHILADELPHIA, PA.

'Commercial Section's Job Is to Promote Wider Use of Electric Service'--Kennedy

ATLANTIC CITY—"The Commercial Section of the National Electric Light Association is charged with the responsibility of promoting the greatest possible use of electric service by all classes of the industry everywhere," declared T. O. Kennedy, vice president and general manager, the Ohio Public Service Co., Cleveland, Ohio, and chairman of the Commercial National Section of the N. E. L. A., before the second general session of the association's convention in Atlantic City, Wednesday morning, June 10.

"Results obtained are, of course, dependent upon the activities of the commercial departments of individual member companies.

"The N. E. L. A. can best aid individual companies, and therefore the entire industry, through well organized and active geographic division commercial sections.

Clearing House for Ideas

"The national commercial section, through its bureaus and committees, desires to encourage and help the geographic divisions—to act as a clearing house for ideas and thus make available to each geographic division the experience of all other divisions.

"It is with this aim in view," he pointed out, "that the national commercial committees are composed, primarily, of the geographic division representatives who head up parallel committees in their own divisions.

"Emphasis has been placed, at all times, on the fact that the purpose of the electric light and power industry, through its commercial organization, is to promote the increased use of electric service and not just to sell merchandise," said Mr. Kennedy.

"Strict adherence to this purpose will insure satisfactory cooperative relations with all other dealer outlets for electrical merchandise. The sincere agreement to observe ethical standards in the conduct of our merchandising business constitutes the only statement of principles necessary in the proper solution of the problem of trade relations.

"As in every commercial undertaking, the success attending our efforts to increase the sale of our service will be proportionate to the degree with which we secure the confidence and good will of our customers.

"Here we encounter the biggest problem of the light and power industry today—a problem that is not specifically commercial, but the solving of which, in my opinion, can be accomplished only by the commercially-minded men and women in the industry.

"I refer to the question of how to gain and hold the confidence of the public to such an extent that it will refuse to be misled by the rantings of political demagogues who are seeking to construct a national political issue of that figment of their imagination—the so-called 'power trust.'

"Those of us who have chosen the electric public utility business as the field of our life work are certain, of our own knowledge, that there is no 'power trust,' and that, furthermore, there are no reasons why the electric light and power industry should be put on the defensive before the American public."

Because of its training, Mr. Kennedy maintains, the commercial department is best fitted of all departments of our industry to meet this present situation.

"They have learned," he said, "that in any selling attempt—be it commodity, service or idea—it is essential to maintain an aggressive attitude.

Reach Customers First

"When the persecutor of our business 'views with alarm,' we cannot be satisfied to merely 'point with pride,' but we must take the lead and reach the public first with such telling sales arguments that our customers will be fully aroused against misleading and false charges pertaining to our industry," the speaker averred.

"Today, 41 per cent of our customers use only three per cent of our kilowatt-hours, but are responsible for 99 per cent of our public relation—i. e. political—troubles. Is it not our fault that these 10,000,000 customers have absolutely no knowledge of the fundamental economics of our business?" asked Mr. Kennedy.

"Consider, for example, the method of charging for electric service. With rate schedules based on a price per kilowatt-hour, it is only natural that our customers look upon electricity as a commodity, whereas we have always known that it can equitably be sold and charged for only as a service.

"As we look back over the past 50 years, it seems to me that the development of the watt-hour meter was perhaps the most unfortunate happening in the history of our industry.

"With the actual variable cost of the kilowatt-hours used by the average domestic customer, less than one-tenth the total cost of serving him, the adoption of a rate policy based on the measurement of kilowatt-hours certainly evidences a total lack of commercial judgment.

"Being a regulated monopoly business, it is to be expected that our customers judge our rates on the basis of cost of the service to us rather than its value to them. And our industry has only itself to blame for the fact that the public finds it difficult to understand the preponderance of fixed charges in the cost of electric service supply," he declared.

"Too many companies," the speaker pointed out, "will invest $250 per customer in plant facilities, lines, and meter and then do nothing to induce the customer to use sufficient service to pay a return on the investment."

Mr. Kennedy named two ways of meeting this situation:

(1) The rate schedule offered the customer must be one that will encourage him to use more service.

(2) He must be sold equipment through which he *can* use such additional service.

"Company executives frequently overlook the fact," Mr. Kennedy went on, "that the surest route to better public relations is through commercial activity, and the sale of more and more service to the customer so he will come to have a real appreciation of what electricity means to him in the improvement of his living conditions.

"It is the customer with the small monthly bill who complains, and the quickest way to convert a chronic kicker is to sell him $5.00 worth of service per month instead of $1.50 worth," he concluded.

McELHINNY COMPLETES TOUR OF WESTERN CITIES

MT. CLEMENS, Mich.—W. D. McElhinny, vice president of Copeland Sales Co., has just returned from an extended business trip through the Southwest and West. This completes a tour of the entire country made by Mr. McElhinny this year.

Included in the cities visited was Dallas, Texas, where a one-day Copeland district distributor convention was held with about 80 distributors and dealers from the Dallas territory attending.

He stopped at Tyler, which is in the heart of the new oil field that has been opened up recently in Texas. At Houston he held another one-day district convention. Then he stopped at Beaumont the center of the cotton growers of the state.

Another one-day convention was held at San Antonio which was attended by about 75 distributors and dealers. Two days were spent at El Paso.

From Texas he went to Los Angeles where he held a two-day district convention which was attended by about 175 Copeland distributors and dealers. He then made a trip through the state by automobile, stopping at various cities. At San Francisco, he held another district convention with an attendance of about 75.

Going to the state of Washington he established a new distributor at Portland, naming L. Robinson and Samuel Soble as Copeland representatives. A convention was held at Seattle and from there he went to Spokane.

TAFEL-WILLIAMS TRANSFER GENERAL OFFICES

LOUISVILLE — Tafel-Williams, distributor of Westinghouse refrigerators, has moved general offices from Third and Guthrie Sts. to 329 W. Main, retaining the Third and Guthrie location for the retail office and display room.

Cappell's House Furnishing Co., Springfield, Ohio, which was appointed Westinghouse dealer last month sold 28 models in the first two weeks.

J. C. Moncier is now manager of Westinghouse department of the Chapman Drug Co. at Knoxville.

AUTOMOTIVE CONCERN TAKES NORGE FRANCHISE

TACOMA, Wash.—Homer King, Inc., automotive distributor, has been appointed Tacoma and western Washington representative for the Norge refrigerator.

PEIRCE-PHELPS CONDUCTING EDUCATIONAL MEETINGS

PHILADELPHIA — Peirce-Phelps, Inc., Majestic distributor, is holding meetings with its dealers throughout the eastern Pennsylvania territory. Meetings have already been held in Wilkes-Barre, Harrisburg, Reading, Scranton, Sunbury, Williamsport, Allentown, and Easton, Pa., Atlantic City, N. J., and Wilmington, Delaware.

They are held for the purpose of discussing the proper merchandising of Majestic refrigerators. Walter P. Davis, refrigeration sales manager, has directed them.

'Willie' Takes Up Advertising

Willie Vocalite, the man with the iron countenance, who paraded the streets to advertise the opening of the new display rooms of the Lindburg Refrigerator Co., at 222 N. Grand Blvd., St. Louis, Mo.

Flexotray Uses Ripley Copy

DAYTON—"Believe it or not," but Robert L. Ripley, the famous cartoonist, is finding the flexible rubber ice tray a veritable fount of unusual facts.

The national magazine advertising campaign of the Inland Mfg. Co., of this city, is directing attention to its "Flexotray" and its other rubber freezing trays through the medium of Ripley

BELIEVE IT OR NOT ------- By Ripley
ICE CUBES FROM FLEXIBLE TRAYS ARE COLDER AND LARGER THAN CUBES FROM THE SAME SIZE METAL TRAYS
EXPLANATION OF RIPLEY'S CARTOON BELOW
• • • ICE CUBES THE MODERN WAY
Ice cubes frozen in flexible rubber freezing trays need not be partially melted to release them—a slight finger tip pressure "pops" them out—from "tray to glass instantly." Therefore the cubes are larger, colder, clean, sharp-edged—you get all the ice you freeze—no cubes are wasted.
Make sure the refrigerator you buy has this modern convenience.
Modernize Your Refrigerator
An inexpensive flexible rubber ice tray is made to fit every automatic refrigerator—the Flexotray for Kelvinator—the DuPlex tray for General Electric—the Quickube tray for Frigidaire—and Flexotray for Westinghouse, Copeland, Leonard, Electrolux, Servel, Universal, and others.
See the local dealer for your make of refrigerator or write us direct, giving make of refrigerator and number of ice cube spaces in your present trays.
THE INLAND MANUFACTURING CO.
Department M, Dayton, Ohio
Flexo Tray
ICE CUBES INSTANTLY—TRAY TO GLASS

Second Advertisement in Series

cartoons. The series of advertisements, now appearing in 16 national publications, it is stated, is the first ever illustrated by Ripley in conjunction with his famous "Believe It or Not" heading.

Topping each of the "ads" of the series is a typical Ripley cartoon, setting forth a feature of the flexible rubber ice tray. Then follows the text of the advertisement, offering an explanation of the cartoon in the terse, yet interesting, manner employed by Ripley in his daily newspaper feature.

The series of advertisements was prepared by the Geyer Co., Dayton advertising agency.

National publications selected for the campaign, in many of which the "Believe It or Not" advertisements are now appearing, are Collier's, National Geographic, The New Yorker, Vanity Fair, House & Garden, Vogue, House Beautiful, American Home, Country Life, Town & Country, Spur, Sportsman, Polo, Motor Boating, Judge and Electric Refrigeration News.

NEW BRITAIN SALESMEN WIN PRIZES IN CONTEST

NEW BRITAIN, Conn.—New Britain representatives of the Connecticut Light & Power Co., were guests of the Frigidaire Corp. at a dinner at Waverly Inn, Cheshire, June 4, tendered to salesmen who made their sales quota.

The New Britain district won third prize with 195 per cent of its quota in competition with 16 other districts throughout the state. This represented sales of 205 refrigerators in a period of 10 weeks and compares with the sale of 207 in the entire year of 1930.

C. A. Duggan, commercial manager of the power company's New Britain branch, was awarded a cash prize. Others who attended the dinner were: B. H. McElhone, J. P. McQuillan, E. Bourgeois, R. Darroch, F. A. Scott, C. Karpinski, W. A. Schwartz, F. D. Clark, E. A. Stigberg and L. V. Clark.

PHILADELPHIA FIRMS REPORT ACTIVITIES

PHILADELPHIA—With the assignment of Vice President A. L. Swengle, of the Homer C. Davis Co., Kelvinator distributor at 36 S. 17th St., to the management of the Philadelphia wholesale sales, and Robert Bitting to director of out-of-town sales to dealers, the local firm announced that the number of dealers in the territory served by the firm had been increased to 95 since the Davis Co. acquired distribution here last March.

There are now 30 city dealers, the remainder being distributed over the territory in eastern Pennsylvania, Delaware and Maryland.

Kelvinator refrigerators are being used in the various institutions of the City of Brotherly Love. In the Philadelphia General Hospital, the municipal institution and the largest in the city, there are complete Kelvinator units in the general kitchen, storage, babies department and in the diet kitchen.

The new West Philadelphia Women's Hospital, construction of which began last week, will include a series of water coolers, kitchen equipment, diet kitchen units, nursery and other Kelvinator refrigeration equipment.

Supplee Biddle Hardware Co., 513 Commerce St., chain store hardware dealer, has been featuring White Mountain refrigerators made by the Maine Mfg. Co. of Nasshua, N. H.

The former Philadelphia Victor Distributors, Inc., a concern that for more than a quarter century had been distributor of the Victor talking machines and radios, has reorganized and will take over distribution of Mayflower refrigerators.

Officers of the firm are: Harry A. Ellis and Raymond J. Boldt.

Three new units of the gasoline driven, full automatic Copeland refrigerators are now on display in the showrooms of the Elliott Lewis Electrical Co., 1017 Race St.

Tying in with one of the large building supply contractors in this city, the Lewis Kline Corp., the Schaffhauser-Kiley Corp. has been able to acquire a good business in the installation of the Servel refrigerators in apartment houses now under construction or about to be built.

BADGER CORP. IN MILWAUKEE ADVANCES HAMILTON

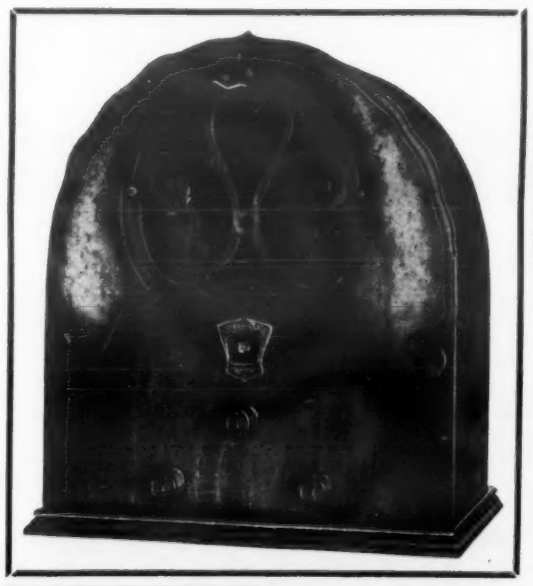
MILWAUKEE—The Badger Radio Corp., distributor of the Majestic refrigerators has named C. W. Hamilton as vice president in charge of refrigerator sales.

Mr. Hamilton has been associated with the Badger company as refrigerator sales manager since November, 1930. He entered the refrigeration field as sales manager for the Iowa Frigidaire distributor, later becoming associated with the Frigidaire Corp. in the capacity of assistant zone manager.

During the latter part of 1929 and 1930, he was sales manager for Frigidaire distributor in Milwaukee.

SELLS FIVE HIS FIRST WEEK

SCRANTON, Pa.—Howard Seid sold five General Electric refrigerators his first week in this territory. Mr. Seid is a new salesman for the Scranton Electric Co., local dealer for Page-Morris, Inc.



Model "K"
with PENTODE

The greatest little package of concentrated power and pep ever produced. A great distance-getter with tone as true and mellow as an old violin. Has every new radio feature, including THREE SCREEN-GRIDS—PENTODE—VERNIER DIAL, KILO-CYCLE MARKED AND ILLUMINATED—FULL DYNAMIC SPEAKER—SAFETY FUSE—SELF-HEALING CONDENSERS—EXQUISITE WALNUT AND MAPLE CABINET and FULLY SHIELDED CHASSIS.

RETAIL LIST PRICE COMPLETE WITH TUBES **$49.95**

TRAV-LER

THE PIONEER, SCORES AGAIN WITH THE FIRST COMPLETE LINE OF SMALL TYPE RADIO FEATURING RADIO ENGINEERING'S MOST AMAZING NEW DEVELOPMENT . . .

THE **PENTODE** TUBE

And this marvelous new feature is not confined to just one model, the complete line features it throughout. Even the lowest-priced TRAV-LER, at $29.95 retail complete, has it—unheard-of at such a price—and placing TRAV-LER DEALERS miles ahead of the crowd.

The small-type radio, low in price and wonderfully efficient, has literally "taken the day." It has lifted the radio entirely from a highly specialized field to "package business"—where you can sell it satisfactorily and PROFITABLY. *Is there any earthly reason why you should not share in these profits, lying almost on your doorstep?*

There are NO QUOTAS—OR OTHER BURDENING RESTRICTIONS in the TRAV-LER proposition—just a clean-cut, sensible policy—and a money-maker. There is everything to gain and nothing to lose. Write for it AT ONCE—NOW—TODAY!

TRAV-LER MFG. CORP., ST. LOUIS

DENVER CO. STARTS EXPANSION PROGRAM

DENVER (UTPS)—The Williams Ice-O-Matic Corp. has launched an expansion program in the Rocky Mountain region, including all of Colorado, Wyoming and New Mexico.

The Foster Auto Supply Co. of Denver, distributor, with L. W. Townsend, as general sales manager, recently placed 50 machines over a period of 12 days.

New dealers appointed in the territory are: Maxwell Mercantile Co., Lamar; H. H. Jeffry, Durango; M. J. Dugan, Fleming; Daniels and Fisher Dry Goods Co., Denver; City Pharmacy, Walsenburg; Brighton Motor Co., Brighton; City Plumbing and Heating Co., Boulder; Krueger Plumbing and Heating Co., Fort Collins; Gas and Electric Appliance Co., Colorado Springs; McEwan-East Plumbing Co., Trinidad; McCune Oil Co., La Junta; Clatworthy Hardware Co., Fort Morgan; C. L. Grief, Lafayette; Bannister Furniture Co., Grand Junction, and the Bateman Hardware Co., Salida, all in Colorado.

George H. Kilker, Casper; J. H. Vogel, Cody; City Paint and Furniture Co., Sheridan, and H. H. Fritzler, Worland, all in Wyoming.

E. R. Elvin, East Las Vegas; New Mexico Music Co., Albuquerque; Independent Electric Co., Silver City, all in New Mexico.

ADVERTISING CAMPAIGN GETS APARTMENT ORDERS

By Ruel McDaniel

DALLAS, Tex.—Griswold-Rogers, Inc., G. E. dealer, here recently conducted a newspaper advertising campaign in the interest of apartment house installations. The campaign featured apartment houses which had been equipped by this company, from the viewpoint of the apartment house tenant.

In a series of full-page advertisements the company carried photographs of important installations, and appealed to apartment seekers to consider the electric refrigeration offered when looking for apartments.

Each apartment house picture carried the name and address of the place. Appreciative of this publicity, apartment house owners became "satisfied users." Managers of other apartments became easier to approach, salesmen found.

SERVEL DISTRIBUTOR SIGNS UP NEW DEALERS

SPRINGFIELD, Ill.—The Capital City Paper Co. announces that Henson Robinson Co., 114 N. Fifth St., Schmidt Bros., 1208 E. Laurel St., Bruce Co., Monroe near Second St., and Frank A. Bridge, who operates a jewelry store at 208 S. Fifth St., all of Springfield, are now dealers for the Servel refrigerator. Rabjohn and Reid, Jacksonville, Ill., The Waddell Music Store, Pana, Ill., and Wm. L. Horstman, Waverly, Ill., are also dealers.

Recently the Capital City Paper Co. appointed 75 dealers in its territory. This company is wholesale and retail distributor for the Servel for the state of Illinois, except the extreme northern portion.

Block and Kuhl with large department stores at Decatur and Peoria, Ill., have become dealers for the Servel refrigerator. Robesons' in Champaign, Ill., has also put in a line of Servel refrigerators.

PATTERSON CO. AUGMENTS SALES FORCE

MIAMI (UTPS) — George Patterson, Inc., distributor of General Electric refrigerators, has augmented its sales force by establishing eight retail outlets in the various shopping districts of Miami and vicinity.

The selling force in the central office has also been increased to 16 domestic salesmen, who are working under two supervisors.

A commercial and apartment house department has also been organized, with five salesmen working under the direction of one supervisor.

TWO COMPANIES NAMED MONTGOMERY DEALERS

MONTGOMERY, Ala. — The Jesse French Sons, Inc., music dealer here has taken a franchise for Starr Freeze and Ice-O-Matic refrigerating machines.

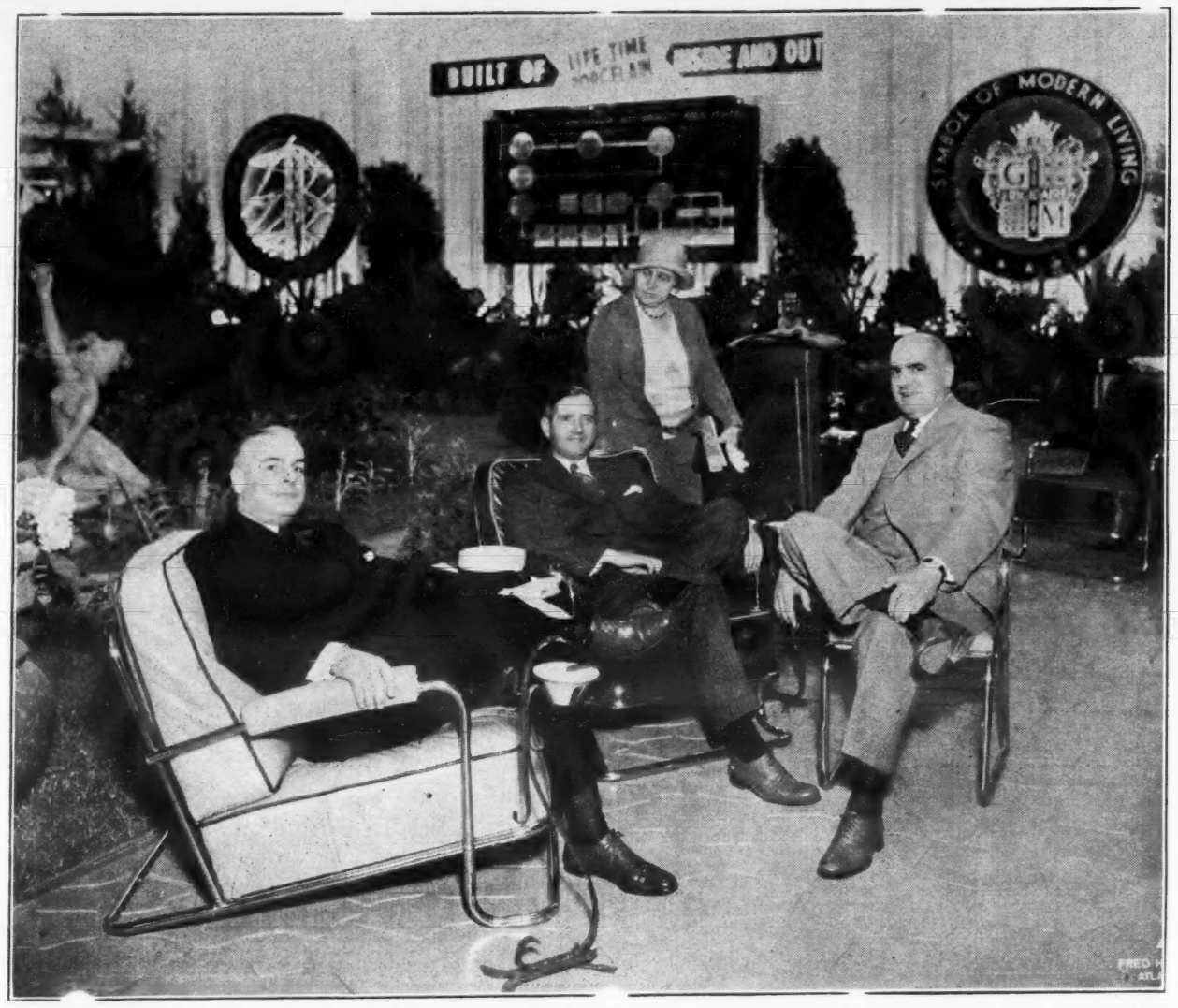
The Leonard electric refrigerator is handled here by the Frank Tennille Furniture Co.

OPENS WEST COAST OFFICE

LOS ANGELES (UTPS)—To the dozen or more representative refrigeration companies established in Los Angeles has been added the Ice-O-Matic refrigeration division of the Williams Oil-O-Matic Heating Corp.

Los Angeles headquarters are located at 1616 S. Figueroa.

Visiting in the Realistic Frigidaire Garden



C. E. Greenwood (center), commercial director of the N. E. L. A., enjoys a moment's respite from convention activities with James Knight (left), and J. A. Borland (right), Frigidaire. Jean Adair, Frigidaire home service representative, pauses long enough to be photographed before continuing her inspection tour.

Willis Company Pays Extra Earnings to Salesmen for Obtaining 80%, or More of Year's Sales Quota

CANTON, Ohio — Additional income for retail salesmen selling 80 per cent or more of their annual quotas has helped the Willis Co., General Electric refrigerator distributor here, meet the problem of turnover of salesmen.

The extra earnings above the regular 10 per cent commission, are paid to the salesmen during the winter months.

Conditions under which Willis retail salesmen may make themselves eligible for additional income are covered in the agreement printed below.

1. The salesman acknowledges that there is no other agreement, either written or verbal, covering his earnings while he is employed by the Willis Co.

2. The salesman agrees to accept this schedule of payment in its entirety and agrees that he must comply with each and every condition herein set forth before he becomes entitled to additional income, above the 10 per cent commissions.

Ten Per Cent Commission

3. The salesman agrees that he is to receive 10 per cent of the current f.o.b. factory selling price on all sales which are accepted by The Willis Co. management and which are sold at the selling price outlined by The Willis Co. This 10 per cent of the f.o.b. selling price is due and payable to the salesman at the next regular pay-day of The Willis Co. following the date of the sale and acceptance of this sale by The Willis Co.

4. The salesman agrees that the Willis Co. shall have the right to withhold the payment of the 10 per cent commission in any case where no down payment has been made on a refrigerator purchase or in cases where the down payment is so small that the Willis Co. does not feel justified in paying the commission until additional payments have been made which will bring the customer's equity in the purchase up to a point which is satisfactory to the Willis Co.

5. The salesman agrees that the Willis Co. shall have the right, at all times, to appraise any ice-box or other article traded in on any sale made by the salesman and shall have the further right to deduct from the salesman's 10 per cent commission any difference between the amount at which the ice-box or other article was traded in and the amount at which the ice-box or other article was appraised by the Willis Co.

6. In case of a repossession, the salesman agrees that the Willis Co. shall charge back to the salesman, 10 per cent of the unpaid balance of the contract at the time that the repossession was made. For example, a $300.00 sale, 10 per cent or $30.00 commission is paid. The customer pays in all, $100.00 and then defaults and the machine must be repossessed. The salesman did not really make a $300.00 sale. He made a $100.00 sale. He retains the commission on this amount and we charge him back with 10 per cent of $200.00 or $20.00.

7. The salesman further agrees and understands that he will be entitled to a refund of any amount of money for which the traded in ice-box or other article is sold above the amount at which the ice-box or other article was appraised by the Willis Co.

8. The salesman agrees that the Willis Co. shall have, at all times, the right to discharge him at the Willis company's discretion, and any employe so discharged, agrees that he thereby, without further recourse, forfeits all claim for any sum of money above the 10 per cent commission as outlined in paragraph three.

9. The salesman agrees that he is privileged to sell and obtain commission only on domestic G. E. models, when and if sold for domestic use, and that he is not privileged to sell or to collect commission on commercial or apartment house refrigerators, ice cream cabinets, water coolers or any other General Electric refrigerators which might be later added, except those models which are termed domestic models according to the classification of the General Electric Co.

10. The salesman agrees to accept 75 domestic units as his annual quota.

Extra Earnings

11. The salesman acknowledges that he will be entitled to the extra allowances that are outlined next below provided he complies with all of the conditions also outlined next below covering such extra earnings.

(a) For selling between 80 per cent and 84 per cent, inclusive, of the above quota he shall be eligible to participate in a sum of $300.00, provided that he remains continuously in the employ of the Willis Co. He may draw this money at no more than $20.00 per week, on the Willis company's regular pay day, after Oct. 1, 1931, and continue each Saturday until the entire amount shall have been withdrawn, except that he may not withdraw the $20.00 on any week, during which he has made a sale of a G. E. refrigerator. Any amount of this $300.00 which remains undrawn on April 1, 1932, is payable in a lump sum at that time. For the purpose of further stimulating the salesman's effort the Willis Co. will pay, in addition to the $300.00 just mentioned, in the following manner:

The salesman selling between 85 per cent and 89 per cent, inclusive, of his quota, will receive $2.00 per unit for every unit sold during that year in addition to his participation in the $300.00 as outlined above.

(c) The salesman selling between 90 per cent and 94 per cent, inclusive, of his quota, will receive $2.50 per unit for every unit sold during that year in addition to his participation in the $300.00 as outlined.

(d) The salesman selling between 95 per cent and 99 per cent, inclusive, of his quota, will receive $3.00 per unit for every unit sold during that year in addition to his participation in the $300.00 as outlined.

(e) The salesman selling 100 per cent of his quota or up to 99 refrigerators, will receive $4.00 per unit for every unit sold during that year in addition to his participation in the $300.00 as outlined.

(f) The salesman selling 100 refrigerators or more will receive $5.00 per unit in addition to his participation in the $300.00 as outlined.

12. The salesman agrees that he shall be entitled to payment in only one of the above percentage scales and that the payment will be for the highest percentage to which his sales accomplishments entitle him.

13. Any amount of money due to the salesman as a bonus for selling 85 per cent or more of his quota is due and payable to him on January 10, 1932.

14. The salesman agrees that he will render a daily report to the Willis Co. showing at least three interviews per day in which he has earnestly tried to sell a General Electric refrigerator and will comply with the selling instruction and policies outlined by the Willis Co.

Discount Sales

15. The salesman agrees that the 10 per cent commission as outlined in paragraph three does not apply in the sale of any refrigerator which, for any reason, is sold for less than the retail delivered list price. In such cases the following schedule of commissions will apply:

(a) In cases where one or more refrigerators are sold at 5 per cent discount, the salesman's commission will be 7½ per cent of the net billing, not including the freight, warehouse and drayage.

(b) In cases where one or more refrigerators are sold at 10 per cent discount, the salesman's commission will be 5 per cent of the net billing, not including the freight, warehouse and drayage.

(c) In cases where one or more refrigerators are sold at 15 per cent discount, the salesman's commission will be 2½ per cent of the net billing, not including the freight, warehouse and drayage.

(d) All units sold at greater than 15 per cent discount are to be considered as wholesale business, on which the Willis Co. reserves the right to pay or refuse to pay the salesman a commission at their own discretion.

16. The salesman agrees that he has carefully read all of the foregoing agreement and that he understands each and every section contained herein and that he has signed this agreement of his own free will and intent.

SATISFIED OWNERS ARE GOOD SALESMEN

By Kathryn Maddrey

DALLAS, Tex.—The best sales prospects are obtained by calling on housewives who already own electric refrigerators, in the opinion of Howard Hill, who is in charge of Starr refrigerator sales for Bush & Gerts Music Co. of this city.

Every satisfied owner of a mechanical refrigerator leads to other sales more surely than any other factor, and a satisfied owner is glad to give a salesman names of friends who are actually in the market to buy, Mr. Hill believes.

Salesmen in Mr. Hill's organization call on an electric refrigerator owner, and if they find she is not satisfied with the results she is obtaining from the unit owned, they endeavor to help her secure the proper service on the box owned rather than attempt to sell her the product of another manufacturer.

Dissatisfaction in most cases comes from some small difficulty which a service department can remedy. Electric refrigeration is bought for a period of years, and the purchaser does not like to feel she has made a bad buy, Mr. Hill explained.

For about ten weeks Bush & Gerts Music Co. has been retail dealer in Dallas for Starr refrigerators. For some time before the company had a model on the floor, Mr. Hill was busy making a thorough survey of sales possibilities for mechanical refrigeration in the city. The survey was ostensibly made independently of any commercial house.

From this survey, which required about three months' time, it was found that out of each group of about 550 homes visited, 120 now have electric refrigeration. Of the remaining 330, approximately 75 expressed the intention to buy. At many homes the particular product to be purchased had already been decided upon. The city was divided into districts, and only those which have a definite buying power were surveyed.

Before joining Bush & Gerts last November, Mr. Hill was for many years with the Gulbransen Piano Co. of Chicago. He conducted similar surveys in many parts of the country in connection with his sales work for that company.

Piano salesmen can make good at selling electric refrigerators, Mr. Hill said because they are specialty men who are accustomed to handling a quality product of a similar price range. While Bush & Gerts is developing a sales organization especially for their refrigeration department, they are giving the piano salesmen the opportunity to sell refrigerators as well.

CRASHING REFRIGERATOR PUT ON DISPLAY

MASON CITY, Ia.—The average store owner would have groaned to see an electric refrigerator lose its balance in a second-story display window, and go crashing 15 ft. to the sidewalk below. But Don McPeak, manager of the Mason City Hardware Co. here, capitalized on that accident by placing the machine on exhibit, explaining to his prospects full details of the fall, and pointing out the machine's sturdiness.

The accident occurred when a plank on a show platform broke as workmen were loading the refrigerator onto it. The refrigerator was little damaged, being in good running condition after its rapid descent to the ground, manager McPeak reports. A few panels had to be replaced, but the steel frame was not even sprung.

NEW DEALER ORDERS BIG INITIAL SHIPMENT

SAN FRANCISCO—Sherman Clay & Co., piano and music merchants in this city since 1870, who operate 16 branch stores in northern California, including eight in San Francisco and one in Oakland, is now selling Kelvinators under Collins Kelvinator Corp.

George Marsh is merchandise manager of the company. J. N. Carson and Maurice L. Richaare are in charge of the new Kelvinator division.

Sherman & Clay ordered three carloads of Kelvinators as a starter, based on an estimated quota of more than half a million dollars business in 1931.

WICHITA FALLS DEALER WINS PRIZE IN CONTEST

WICHITA FALLS, Tex.—The Texas Electric Service Co., of this city, was awarded first prize for a window display in a recent contest conducted by P. M. Bratten Co., Fort Worth distributor for the Frigidaire Corp.

The contest ran during April, and was open to all dealers in the Fort Worth territory.

WHITE MOUNTAIN DEALER

STAMFORD, Conn.—The Rome Furniture Co. has been appointed dealer in southwestern Connecticut territory for the White Mountain electric refrigerator.

SAYS GOVERNMENT RETARDS BUSINESS

ATLANTIC CITY, N. J.—Declaring that "taxation for paternalism is tyranny," C. E. Groesbeck, president of the Electric Bond and Share Co. at the third general session of the N. E. L. A. convention, June 11, asserted that government interference with American business is one of the important factors which is retarding the return of prosperity.

"One of the most serious brakes upon returning prosperity, one of the many causes of our present situation, and one of the factors which must be considered in any general movement toward better things, is the fear of further infiltration of governmental dictation into the life and labors of the American people," said Mr. Groesbeck.

Citing government ownership of the railroads, government shipping lines, and government control of grain prices, he quoted the declaration of a lumber executive to the effect that fear is not conducive to progress.

"This," said Mr. Groesbeck, "is a text to which every industry in the country can subscribe. Fear of government. Fear of government competition. Truly, if such fear is conducive to anything it is conducive to delay, to timidity, to loss and to unemployment.

"It is not only the large and far-flung industries that have felt the heavy hand of boards, bureaus and commissions, or have experienced the effects of government competition sanctioned by the action of legislative bodies.

"The country printer, with his job press, has protested in vain against government invasion of his business through printed envelopes and return cards prepared, distributed and sold under government auspices.

"Dealers in coal, oil, gasoline and other commodities face government competition where states and municipalities are usurping their functions and undertaking the sale of these commodities at so-called cost.

"One effect of government competition with business," he declared, "is the increase in the cost of government, and mounting taxation.

"Each extention of governmental activity," he said, "must be paid for in taxes. Each new board and bureau, established in federal, state or local government must be paid for by an addition to the tax levy.

"In 1913 the government took in taxes from the public $22.66 for each man, woman and child in the United States. In 1929, the government took $80.58 per capita, or 225 per cent more. The cure for this situation," Mr. Groesbeck contended, "is greater public interest in the policies of government."

JOHN J. YOUNG PROMOTED BY BUFFALO COMPANY

BUFFALO, N. Y.—The National Refrigeration Corp., recently announced the promotion of John J. Young, former sales manager of the company to the position of general sales manager.

Mr. Young has been connected with General Motors of Buffalo for more than 10 years and three years ago was transferred from the Chevrolet to the Frigidaire division.

BERRY TAKES DEALERSHIP FOR NORGE LINE

NASHVILLE, Tenn.—A dealership for the Norge electric refrigerator has been accepted by M. H. Berry, who now carries a complete line of Crosley and Brunswick radios.

He was formerly connected with the Crosley Radio Corp., and was radio editor of *The Nashville Tennessean*. Berry now holds a patent for a radio loud speaker.

OHIO CO. NAMES SCHODORF DOMESTIC SALES MANAGER

COLUMBUS, Ohio—The appointment of Carl A. Schodorf as manager of domestic sales for Kelvinator-Columbus, Inc., has been announced.

Mr. Schodorf was associated with the sales department of the McLeish-Kelvinator Co. for more than a year.

GORDON PRENTICE VISITS DEALERS IN FIELD

SEATTLE, Wash.—Gordon Prentice, distributor of General Electric refrigerators, has recently completed in company with sales officials, a swing through his distributing area in Washington.

SPRINGFIELD CO. ASSUMES DISTRIBUTORSHIP

SPRINGFIELD, Ill.—The John Bressmer Co. has taken distribution of the Westinghouse refrigerator in this territory. One of the first appointments by the new distributor was that of the Meador Electric Co. of this city as dealer.

They Handle Sales Promotion for Rex Cole

E. H. Campbell, manager, is seated in the front row, with Walter Daily of the General Electric Co. at his right.

CALIFORNIA DEALERS TAKE TO FAIRWAYS

LONG BEACH, Calif.—Kelvinator distributors and dealers of southern California recently enjoyed their second annual outing and golf tournament at Recreation Park here.

R. L. Darby, head of the R. L. Darby Co., was host at a luncheon at the Park and also at a feast set at "The Garden of Allah" in Long Beach.

W. R. Gaylord of Santa Monica, captured first prize with a low of 82. Frank Topping, district service manager from Los Angeles, turned in an 83. L. D. Robertson, vice president of Collins-Kelvinator, Los Angeles, had a score of 85.

Others present were: Charles Mercer, B. J. Heath, A. A. Carlson, F. Schroeder, J. G. Phillips, C. W. Murney, B. A. Metz, J. J. McQuaid, G. L. Nicholson, G. L. Lane, N. Norris, B. A. Martin, O. F. Boyer, W. R. Clayton, W. H. Collins, J. T. Given, and C. J. Bryant.

DISTRIBUTOR AVERAGES CARLOAD A WEEK

KANSAS CITY, Mo.—An average of a carload of refrigerators a week are sold by the Ryan Radio & Electrical Co., distributor for Starr Freeze electric refrigerators, according to W. C. DeBold of that company.

The company has appointed 27 dealers, all of whom work in the territory of Missouri and Kansas. The owners of the company are W. C. DeBold, George Ryan and A. C. Cooper.

CALGARY FIRM TO HANDLE SERVEL HERMETIC

CALGARY, Alberta, Can.—The Matthews Music House, Ltd., has been recently appointed dealer for the new Servel Hermetic by the Wilson Coal & Coke, Ltd., according to the Servel export offices, New York City.

The home of the Matthews Music House, Ltd., is located on the main business avenue, where it has its showroom.

TURNEY JOINS DES MOINES MUSIC COMPANY

DES MOINES, Iowa—H. R. Turney, formerly manager of the electric refrigeration department of the Anderson Furniture Co. of this city, has been appointed manager of the electric refrigeration and radio departments of the Des Moines Music Co.

DEPARTMENT STORE TAKES DALLAS DEALERSHIP

DALLAS, Tex.—Titche-Goettinger Co., one of the three largest department stores in this city, and one of the Hahn group, has been named a retail dealer for Frigidaire, according to S. G. Hagy, sales manager for Galloway-Fuess Co., distributor in north Texas.

MEYER JOINS MAJESTIC EXPORT DIVISION

CHICAGO—Herman F. Meyer joined the Grigsby-Grunow Co., June 1, as assistant foreign sales manager. Mr. Meyer has been in the export trade field for a number of years.

ICE-O-MATIC DEALER NAMED

SPRINGFIELD, Mass.—M. J. Kittredge, Inc., 1354 Main St., has been appointed retailer dealer for the Williams Oil-O-Matic refrigerator in this city.

WELLS ESTABLISHES BRANCH

DULUTH, Minn.—The Marshall Wells Co., Norge distributor of this city, has established a branch in Portland, Ore.

* * *

Campbell Directs Six Divisions

NEW YORK CITY.—More than 50 persons are employed in the sales promotion department to handle the extensive sales promotion activities of Rex Cole, Inc., New York distributor of General Electric refrigerators.

From an original personnel of three, with a limited scope of duties, the department has expanded to more than half a hundred.

Grouped in six divisions, under the direction of E. H. Campbell, manager, this department handles the large amount of advertising—over three times the space that was employed three years ago—the school of salesmen before they enter the selling field, the organization of direct mail campaigns and the planning of sales drives.

Emphasizing the function of service to the field organization, one division simplifies the work of the salesmen by taking care of considerable routine involved in prospect, lead and user contacts.

LINCOLN DEALER NAMED

LINCOLN, Nebr.—Robertson Furniture Co. has been named dealer for Norge refrigerators, operating under W. M. Dutton & Sons Co. of Omaha and Hastings, wholesale distributor in Nebraska.

DISTRIBUTOR HOST TO PARTY ON INSPECTION TRIP

SCHENECTADY, N. Y.—Under the auspices of Gentsch & Thompson, Inc., distributor in Boston for General Electric refrigerators, a group of 32 representatives of various banks and real estate operators of Boston and suburbs visited the General Electric Co.'s plant here.

They were conducted through the Research Laboratories and the refrigerator manufacturing buildings. The delegation was headed by Charles D. Gentsch, of Gentsch & Thompson, Inc., and Frank M. Knott of the same concern.

The party was conducted through the plant by J. J. Walker, W. B. Hill, and F. C. Garchet. At a luncheon, Chris Steenstrup, engineer of the company's electric refrigeration department, delivered the principal talk.

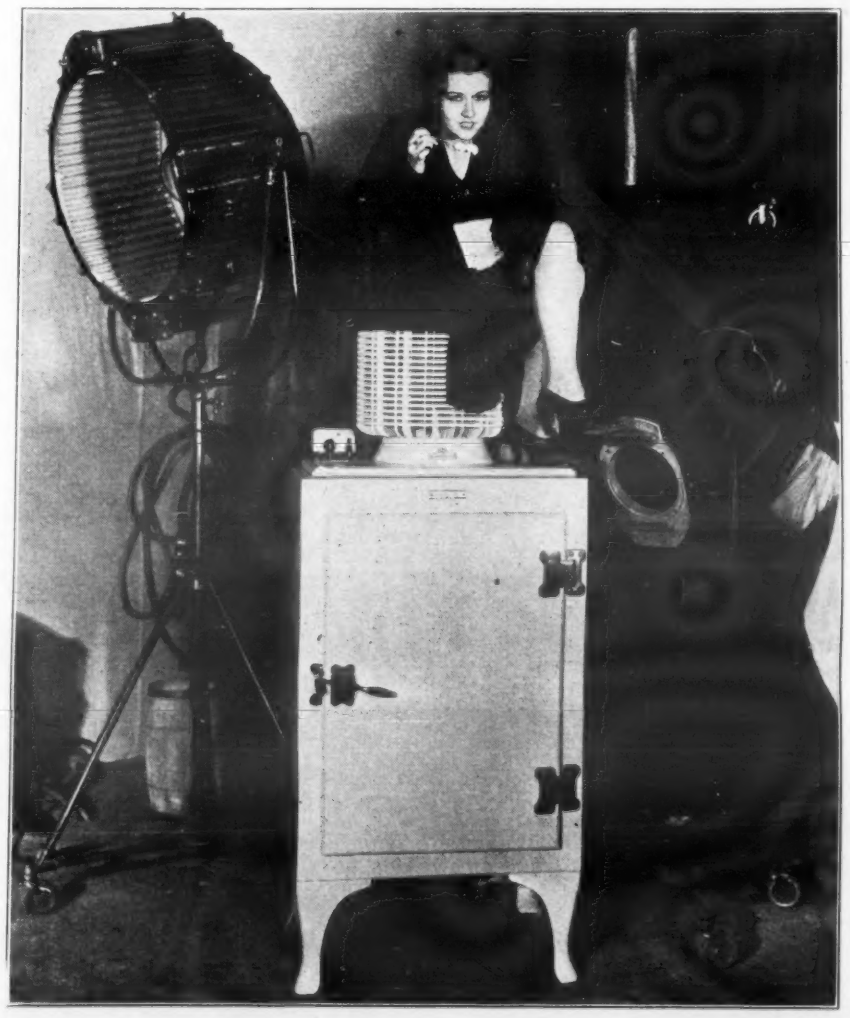
COPELAND NAMES PORTLAND DISTRIBUTOR

PORTLAND, Ore.—L. Robinson and Samuel Soble have been named Copeland distributors for this territory.

Robinson and Soble have a chain of radio stores in Portland and Mr. Soble is also in the furniture business.

Household models will be sold through the chain of radio stores in Portland as well as in the furniture stores. A separate store and wholesale quarters will be maintained covering operations with dealers, commercial and apartment sales.

'On The Top'



Joan Blondell shows how to keep cool.

HOLLYWOOD, Calif.—The property room of a movie studio is a very interesting place, and one will find everything from a safety pin to a half million candlepower searchlight, says Gayb Little of the George Belsey Co., Ltd., General Electric distributor in the Los Angeles territory.

"Every year thousands of people come to southern California to see the scenery and to enjoy the climate and, incidentally, to go through a movie studio," says Little. "No doubt, many of them are surprised to see that a number of studios have an electric refrigerator somewhere on the premises or in the property room, ready to moved to any set that needs them."

Above is shown a corner of the property room in the First National Studios at Burbank, Calif. The young lady who sits on top of the refrigerator is Joan Blondell. Miss Blondell played a rather small part in the recent hit "Illicit" and she did so well that she will now star for First National.

DES MOINES OUTLETS ADD REFRIGERATORS

DES MOINES, Iowa—Announcement has been made of the appointment of several new electric refrigerator dealers and distributors for this territory.

Anderson Furniture Co., 6th and Grand Ave., and the Hamilton Hardware Co., 5th and Locust Sts., have been named dealers for Majestic, distributed in this territory by the Heib Radio Supply Co.

The Des Moines branch of Frigidaire announces the appointment of the O'Dea Hardware Co., 6th and Locust Sts., as retail dealers.

Home Appliance Co. has been named dealer for the Leonard electric refrigerator line.

Valley Chevrolet Co. has been appointed a dealer for Servel, distributed here by A. A. Schreiderhahn Co.

Des Moines Music Co. has been franchised as Norge dealer in this city. This concern also retails several other makes of electric refrigerators.

The Camp Distributing Corp. is now representing the Leonard Refrigerator Co. as distributor in this territory.

LIND HARDWARE CO. NAMED SERVEL DISTRIBUTOR

CHICAGO—The Lind Hardware Co. recently has been appointed exclusive distributor in Chicago for the Servel Hermetic, to replace Schaller Brothers who were former distributors in this territory.

Executives of the company are: Robert Lind, vice president; Warren Lind, treasurer, and Carl Lind, secretary. The president, H. J. Lind, has retired.

An office is maintained in the Loop District at 228 N. LaSalle St., with main offices and warehouse at 5209-15 N. Clark St.

Heads of the firm recently made a visit to the Servel factories to inspect the manufacture of the Servel Hermetic refrigerators. Gordon Bloom, district supervisor for this territory, accompanied the party.

BEAZLEY, SKINNER REPORT GAIN IN BUSINESS

SELMA, Ala.—Beazley, Skinner Distributing Co., distributors of Copeland refrigerators in southern Alabama and northern Florida, report that to June 1 they have sold almost three times as many Copelands as they sold in the same period last year.

Officials of the company also report that conditions in their territory are improving and that the outlook for the remainder of the year is promising.

FRIGIDAIRE-CLEVELAND OPENS NEW BRANCHES

CLEVELAND, Ohio—Frigidaire Sales Corp. has expanded from a Playhouse Square main salesroom and offices at 1371 Euclid, to four additional locations, 15404 Madison Ave., 13515 Euclid Ave., 9900 Lorain Ave., and 2134 Lee Road.

The organization of Wm. F. Gray, former Frigidaire distributor, was recently taken over by the central Frigidaire sales organization.

MERIDEN COMPANY TAKES LARGER STORE

MERIDEN, Conn.—The Connecticut Electric Equipment Co., Frigidaire dealer, has moved from 39 Colony St. to a larger store at 45 Colony St., where better facilities for display will be available. E. B. Wilcox and Samuel Bradford operate the concern.

DISTRIBUTOR SELLS THIRTY NINE APARTMENT MODELS

BUFFALO—Erco, Inc., distributor of General Electric refrigerators, recently made two apartment house installations. In the Avenue Apartments, Delaware Ave. and Allen St., 28 S42 refrigerators were installed.

The new Ashland Apartments, 11 Ashland Ave. were equipped with 49 S42 refrigerators.

DISTRIBUTOR FOR TRUPAR

BIRMINGHAM—The Trupar Mfg. Co., manufacturer of the Mayflower refrigerator, has appointed Wimberly and Thomas Hardware Co. as distributor here.

BOWEN ADDS NEW LINE

GREENVILLE, Miss.—J. A. Bowen has been appointed distributor for Electrolux in this vicinity. Servel is also handled by Mr. Bowen's company.

CANTON NORGE DEALER

CONTON, Ohio—The Service Radio and Supply Co. Inc. has been appointed Norge dealer. U. E. Moser is manager of the company.

OMAHA BUREAU GIVES REFRIGERATION SHOW

OMAHA—The Omaha Electric Refrigeration Bureau held its first refrigeration show in the City Auditorium here, June 9 to 12.

The Nebraska Power Co. not only demonstrated General Electric and Kelvinator models, but put on an electric cooking demonstration, using three different ranges.

Ten separate booths were occupied by local refrigeration firms, each booth taking 20x20 ft. space.

The refrigerators displayed at the show were: Majestic, by R. S. Proudfit & Co.; Kelvinator, by Graybar Electric Co.; Ice-O-Matic, by Schnoeller & Mueller Piano Co.; Westinghouse, by Westinghouse Elec. Supply Co.; Mayflower, by Wright & Wilhemy; Norge, by Dutton & Sons; Frigidaire, by General Radio and Refrigerating Co.; Servel Hermetic, by H. C. Noll; General Electric, by Storz Electrical Refrigeration Co., and Mohawk, by National Accessories Co.

One of the displays featured a chart showing the cost of electricity to owners of electric ranges and refrigerators. A special rate of 3c per kilowatt hour for this purpose is now the regular rate charged in Omaha.

Mrs. B. E. Marsh, in charge of sales for the Nebraska Power Co., and Hal Edwards, sales manager for Westinghouse, were in charge of all arrangements for the Homemakers Show. Attendance for the four days was near the 7,500 mark.

For two weeks previous to the show, the Bureau used large advertising space in the newspapers, while the 30 billboards of the city, ordinarily used to carry selling ideas for the Nebraska Power Co., carried instead, a message for the Homemakers Show.

The Nebraska Power Co. used all 10 makes of refrigerators in demonstrations during the run of the show. Each dealer was furnished 100 folders each day, carrying recipes for the dishes demonstrated that day.

DENNISON CO. OFFERING PRIZES FOR GOOD WINDOW DISPLAYS

FRAMINGHAM, Mass. — A window display contest, open to any of retail establishment displaying any sort of merchandise, has been announced recently by the Dennison Mfg. Co. Prize money offered totals $1,125.

The contest opened on May 1, and closes July 15. Any photograph or snapshot of a display made between these dates is eligible for consideration. Crepe paper must be used.

The judges selected will not be employes of the Dennison Co. A book called "Some Lessons in Window Decorating" and the Dennison Display Bulletin filled with seasonal displays, suggestions, and hints for decorators are being offered by the Dennison organization to anyone interested in this display contest.

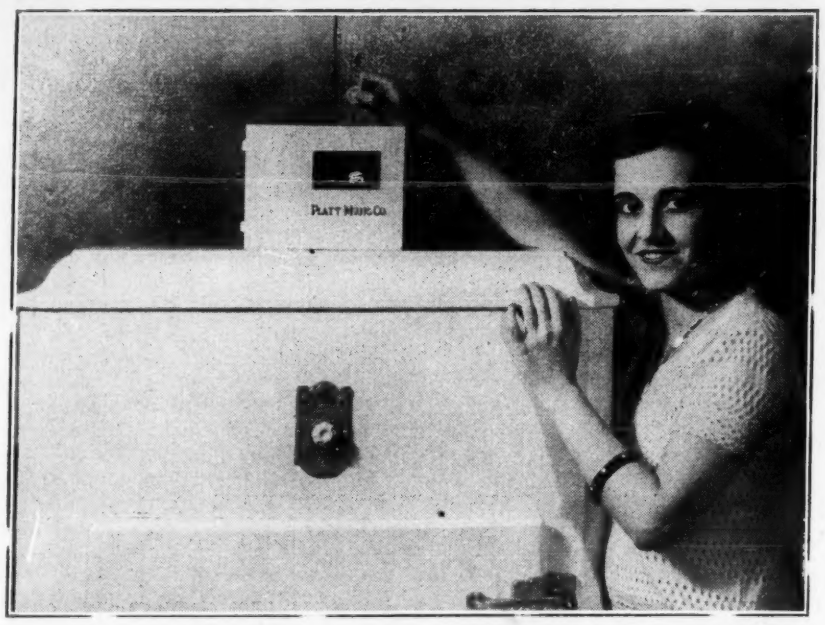
PEORIA CO. APPOINTED DEALER

PEORIA, Ill. — Maleham-Nelson Co., 123 North Jefferson St., recently opened an authorized sales and service organization for Majestic refrigerators and radios, Stromberg-Carlson radios, and electric washing machines.

WOOD CHOOSES ELECTROLUX

MARYSVILLE, Mich. — Gar Wood, Inc., one of the world's largest builders of motor boats, announces that the Marine Electrolux has been selected as standard refrigerating equipment for the Gar Wood line of cruisers and commuter motor boats.

Ordering a Day's Refrigeration



Lady customer placing a quarter in the Meter-Ice movement which will measure 24 hours of current to the machine.

Requests for Information

Readers who can be of assistance in furnishing correct answers to inquiries, or who can supply additional information, are invited to address ELECTRIC REFRIGERATION NEWS, mentioning query number.

Glass Water Coolers

Query No. 421—"We desire to obtain the names of manufacturers of glass water coolers with push type faucets, suitable for use with electric refrigerators.

"We are also interested in obtaining a cooler of the type furnished with Norge refrigerators."

Rubber Ice Cube Trays

Query No. 422—"Will you please advise where I can purchase a rubber ice cube tray, that is 1½ in. deep, 5 in. fide, and 8 in. long? Also one that is 1¼x 3½x7¼ in.

"These dimensions cover the top portion of the tray, which is beveled a slight bit."

Answer: Inland Mfg. Co., Dayton, Ohio.

Dehyrating, Sealing Equipment

Query No. 423—"Can you give us the names of manufacturers of equipment for dehydrating and sealing the ends of seamless copper tubing as used in the refrigeration industry?

"At the present time we are equipped with a water sealed furnace, but have no equipment for dehydrating or sealing the ends. We would be more interested in electrical equipment for performing this work than anything operated by gas or oil."

Refrigerant Charging Meters

Query No. 424—"Please furnish us with the name of some manufacturer of charging meters for use in charging flooded type electric refrigerators in our factory.

"The charging meter should be constructed so that it will indicate pounds by weight of the refrigerant being introduced into the system, rather than by pressure, as our unit is a flooded system."

Air-Cooled Units for Export

Query No. 425—"A French manufacturer of refrigerators with capacities of 750, 1,500, and 3,000 frig. per hour requests names of American manufacturers of air-cooled machines and cabinets with a frigorific power of 500."

Frozen Food Display Cases

Query No. 426—"Please furnish us with the names of manufacturers of frozen food display cases."

Answer to Query No. 426—Dole Refrigerating Machine Co., 1209 Washington Blvd., Chicago, Ill.; Ed. Friedrich, 1117 E. Commerce St., San Antonio, Tex.; Gibson Refrigerator Co., Greenville, Mich.; Grand Rapids Cabinet Co., 415 Alabama, N. W., Grand Rapids, Mich.; C. V. Hill & Co., Inc., 360 Pennington Ave., Trenton, N. J.; Hussman Refrigerator Co., 907 N. Broadway, St. Louis, Mo.; Mills Novelty Co., 4100 Fullerton Ave., Chicago, Ill.; Ottenheimer Bros., Inc., Fallsway and Hillen Sts., Baltimore, Md.; C. L. Percival Co., 11th and Cherry, Des Moines, Iowa; Seeger Refrigerator Co., Wells and Arcade Sts., St. Paul, Minn.; The Warren Co., Atlanta, Ga.; Weber Showcase & Fixture Co., Los Angeles, Calif.; Grand Rapids Store Equipment Corp., Grand Rapids, Mich.

'Watcold' Refrigerator

Query No. 427—"Can you tell us the name of the manufacturer of an electric refrigerator bearing the trade name 'Watcold'?"

Rudd Method of Storing Fruit

Query No. 428—"Please furnish us with the name of the person holding patents on the Rudd method of storing fruit, mentioned on page 11 of your Refrigerated Food Section of March 25."

Names of Presidents

Query No. 429—"Please give us the names of the presidents of the following concerns: Kelvinator Corp., Frigidaire Corp., Copeland Products, Inc., General Electric Co., Servel Sales, Inc., Trupar Mfg. Co., The Norge Corp., M. & E. Mfg. Co., Grigsby-Grunow Co., Mohawk, Grand Rapids Refrigerator Co., and the Apex Electric Mfg. Co."

Answer to Query No. 429—Listed below are the names of the presidents or general managers of the following companies:

G. W. Mason, pres., Kelvinator Corp., Detroit, Mich.; E. G. Biechler, pres., Frigidaire Corp., Dayton, Ohio; Louis Ruthenburg, pres., Copeland Products, Inc., Mt. Clemens, Mich.; P. B. Zimmerman, mgr., General Electric Co., Cleveland, Ohio; F. E. Smith, pres., Servel Sales, Inc., Evansville, Ind.; H. J. Hunt, pres., Trupar Mfg. Co., Dayton, Ohio: Howard Blood, pres., The Norge Corp., Detroit, Mich.; Thomas Evans, pres., M. & E. Mfg. Co., Pittsburgh, Pa.; H. J. Grigsby, pres., Grigsby-Grunow Co., Chicago, Ill.; E. R. Farny, pres., All-American Mohawk Corp., No. Tonawanda, N. Y.; C. G. Frantz, pres., Apex Electric Mfg. Co., Cleveland, Ohio.

We do not know of any company by the name of the Grand Rapids Refrigerator Co. However, if you mean either of the following two concerns, W. L. Malloy is sales manager of the Grand Rapids Cabinet Co., and M. C. Burnside is manager of the Grand Rapids Store Equipment Co. Both of the above companies are in Grand Rapids, Mich.

Hydrolene

Query No. 430—"Please inform us where we can obtain hydrolene to be used in domestic refrigerator cabinets."

Temperature, Humidity Control

Query No. 431—"We are interested in securing the names of manufacturers of adjustable temperature control devices for controlling electric motor circuits by means of variation in air temperatures.

"Can you also furnish us with the names of manufacturers of devices for controlling electric circuits by a variation in the relative humidity of air; in other words, a humidostat?"

Feather Valves for Compressors

Query No. 432—"Will you please advise where we will be able to locate some feather valves for electric refrigerator compressors, or advise where we may procure some of the material to make feather valves."

Answer to Query No. 432—The Detroit Stamping Co., 3445 W. Fort St., Detroit, will supply special Swedish steel stampings.

Machinery for Making Cabinets

Query No. 433—The Willys Export Corp., Toledo, Ohio, is negotiating with a fifirm in Argentina which is interested in securing prices and specifications on machinery suitable for manufacturing cabinets for electric refrigerators, and desires information from American manufacturers. Prices should be given both f. o. b. supplier's factory, and f. o. b. New York.

SUBSCRIPTION ORDER

Electric Refrigeration News
550 Maccabees Building
Detroit, Michigan 1931

Gentlemen: Please enter my subscription to ELECTRIC REFRIGERATION NEWS.

United States and Possessions: ☐ $2.00 per year ☐ Three years for $5.00
All other Countries: ☐ $2.25 per year ☐ Two years for $4.00
Refrigerated Food Section only $1.00 per year.

I am enclosing payment in the form of ☐ Check ☐ P. O. Order ☐ Cash

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or Care of .....
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50 or more subscriptions entered at one time, $1.00 per year each.

6-17-31

Striking Display

Night view of Breckenridge, Inc., Springfield, Mass.

DISTRIBUTOR MAKES EFFECTIVE DISPLAYS

SPRINGFIELD, Mass.—The new display room of Breckenridge, Inc., General Electric refrigerator distributor of this city, combines the advantages of an effective store front with a well-planned interior scheme.

The brilliant electric sign, with the initials "GE" encircling lights and the word "Refrigerator," all in orange; a refrigerator outlined in white with row of green lights beneath, and a rainbow of red, green, blue and yellow, is visible from various directions and provides a striking identification. (See picture below).

Inside the store the walls are modernistically finished in pale green and silver bronze.

Early this year Breckenridge, Inc., formerly G. E. distributor in eastern Iowa, was made distributor for the four western Massachusetts counties of Hampden, Hampshire, Franklin and Berkshire and the central Massachusetts county of Worcester. D. E. Breckenridge is general manager.

This distributorship is unusual in that there are three brothers in the firm. J. M. Breckenridge is retail sales manager and R. W. Breckenridge is product manager. R. E. Hannon, who last year obtained a 100 per cent increase over 1929 business in the Iowa field, is now manager of western Massachusetts operations and J. A. Luce, formerly with the Seeger Co., is manager of Worcester County operations.

THE CONDENSER

ADVERTISING RATE fifty cents per line (this column only).

SPECIAL RATE if paid in advance — Positions Wanted — fifty words or less, one insertion $2.00, additional words four cents each. Three insertions $5.00, additional words ten cents each. All other classifications—fifty words or less, one insertion $3.00, additional words six cents each. Three insertions $8.00, additional words sixteen cents each.

REPLIES to advertisements with box numbers should be addressed to the box number in care of Electric Refrigeration News, 550 Maccabees Building, Detroit, Mich.

POSITIONS WANTED

REFRIGERATION Production Executive Available. Thoroughly experienced in machine and cabinet construction. Valuable background of knowledge pertaining to factory organization, costs and accounting, latest methods plant layout and equipment, production and inventory control, wage payment incentives. Formerly connected with one of the industry's larger companies. Excellent references, record clean and successful. Box No. 342.

INSTALLATION and Service Man available. At present doing miscellaneous service. Previously with Russ Mfg. Co., Cleveland, 3½ years; Frigidaire, Detroit, 1½ years; Absopure, Detroit, 2½ years; Nizer Corp.: Detroit, 1½ years; Westinghouse, Detroit, 2½ years; Telautograph Corp., 4 years. Harold Hunt, 4010 Bush Ave., Cleveland, Ohio.

GRADUATE of National Technical Institute, Cleveland, Ohio, desires connection as service man. Commercial or domestic refrigeration units, also experienced in electrical maintenance. Married. Age 36. Salary no object. Location any place. Riggs, 217 N. 12th St., Wilmington, N. C.

REFRIGERATION engineering. Ten years' experience in household, commercial and marine work. Also purchasing and production. Box No. 336.

EQUIPMENT WANTED

WANTED To Buy new and used electric refrigerating equipment, parts and accessories. Small or large lots of household and commercial machines in working order. Describe fully in first letter, stating all details and lowest price, terms, etc. Clip this advertisement for future reference. Always in the market. Box No. 341.

FRANCHISE WANTED

DISTRIBUTOR AND DEALER ORGANIZATIONS seeking franchise opportunities may use The Condenser column to inform manufacturers of their interest. Advertisements will be inserted under the above heading "Franchise Wanted." The paid-in-advance rate is $3.00 per single insertion of fifty words or less—three insertions $8.00.

EQUIPMENT FOR SALE

USED EQUIPMENT for sale may be advertised in The Condenser column. This column provides an economical medium for the advertiser who does not wish to use display space. Fifty words may be inserted at a cost of only $3.00 (paid-in-advance rate.) Three insertions—$8.00.

PEMBLETON URGES STUDY OF APPLIANCE MARKETS

ATLANTIC CITY—A commercial research bureau plan to dissolve the "slack" between electrical appliance production and sales was introduced during the sessions of the N. E. L. A. convention by P. B. Pembleton of the Public Service Gas and Electric Co., Newark, N. J.

This plan involves a centralized agency or bureau under the auspices of the N. E. L. A., which would establish a means of measuring market demands from month to month and articulating production schedules into these to reduce economic lost motion in both production and distribution.

SEATTLE CO. NAMES BELL AS SALES MANAGER

SEATTLE, Wash.—F. J. C. Bell has recently been named general sales manager for the Washington Home Equipment Co., distributor of the Apex electric refrigerator.

NEW DISTRIBUTOR NAMED

SPRINGFIELD, Mass — Springfield Wholesale Co., has been appointed Iceberg distributor for a large section of Central and Western Massachusetts.

Dealers already appointed include C. C. Clapp, A. J. Stanley, and Radio Sales Co., in Springfield, and John Grant, Jr., Holyoke.

RADIO FIRM ADDS SERVEL LINE

MILWAUKEE, Wis.—The Radio Specialty Co. has recently added to its line the Servel Hermetic refrigerator. The entire sales organization recently visited the Servel factories in Evansville.

APPOINTED SALES MANAGER

BUFFALO, N. Y.—B. L. Kulick recently has been appointed refrigeration sales manager of Majestic Wholesalers, Inc.

Home Service Number

Refrigerated Food Section

In Three Parts Part Two

ELECTRIC REFRIGERATION NEWS

Registered U. S. Patent Office.

The business newspaper of the refrigeration industry

ISSUED EVERY TWO WEEKS
VOL 5, NO. 21, SERIAL NO. 123

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TWO DOLLARS PER YEAR

FRIGIDAIRE LOSES TRADE MARK SUIT AGAINST PACKER

Nitterhouse Application Is Later Ruled Out By Patent Office

WASHINGTON, D. C.—(UTPS)—The opposition of the Frigidaire Corp., of Dayton, Ohio, to the attempt of Nitterhouse Brothers, to register the term "Fridigized Fish," as a trade-mark for fresh fish was dismissed by First Assistant Commissioner of Patents William A. Kinnan on the ground that there was no relationship between the goods involved.

It developed, however, that the application of the fish firm for a trade-mark was thrown out for technical reasons.

Turning to the difference in the goods sold by each firm, the commissioner observed that one party did not sell foods of any kind and the other did not sell refrigerators and said:

"The marks are different and that of the applicant being descriptive, its significance to purchasers as indicating the condition of the food product would, it is considered, far outweigh any possible suggestion of opposer's refrigerator or trade-mark. I know of no adjudicated case, and counsel has cited none, in which goods so widely different in character and kind have been held to possess the same descriptive properties or belong to the same class. I am unaware of any meaning of the words 'same class' that would embrace fish and refrigerators."

ELECTRIC REFRIGERATION INVADES DEATH VALLEY

LOS ANGELES—The George Belsey Co., Ltd., has recently completed installations at the noted Furnace Creek Inn, Death Valley, the lowest point in the United States, which include an S-100 model in the public lunchroom; a Model S-140 in the pass pantry, together with a DP 1 cooler, another cooler in the lobby, also one in a rock niche adjoining the Terrace Rooms and one in the hotel corridor, and a CS-270 in the kitchen.

In the new Southern California Edison Bldg., the Belsey company placed 12 GE cooling units immersed in stainless steel water tanks from which the water circulates to all parts of the building.

Other installations recently completed by the company are those in the new Southern California Telephone Bldg., at 740 S. Olive St., this city, equipment embracing five 17 cu. ft. refrigerators and an ice maker placed at points of service in the cafeteria, and two GE ice makers with 240 lbs. capacity a day.

At the Vista Del Arroyo Hotel, Pasadena, another of the new buildings in and around Los Angeles, four large GE refrigerators totaling nearly 200 cu. ft. in capacity, are on duty in the kitchen, while a 45 cu. ft. box is used entirely for salads. The latter has loading doors at the rear, the front doors being of glass to permit selections.

FIRST SEATTLE A. & P. STORE INSTALLS EQUIPMENT

SEATTLE—A large commercial installation has recently been completed in the first retail grocery of the Atlantic & Pacific Tea Co.'s national chain to enter the Northwest, by the Commercial Refrigerator Sales & Service Co., Frigidaire dealer here.

The installation at the Broadway and Harrison Sts. store includes a 12 ft. case, 8 ft. case, walk-in cooler and a grocery refrigerator, with a number of attractively illuminated display cases.

GROCER PLACES $1,400 ORDER FOR EQUIPMENT

LOUISVILLE—Bomar-Summers Hardware Co., distributor for the Copeland, recently installed an 8 ft. case, an ice cream cabinet, and a walk-in cooler for Leo Stabile, grocer at Floyd and Walnut Sts. The order totaled about $1,400.

This company also placed a 50 cu. ft. refrigerator in the Blue Goose Luncheon at 318 W. Chestnut St.

Home Service Girls Enjoy Salt Breezes

Home service directors strolling on the Boardwalk at Atlantic City. Left to right—Consuelo Kelley, Newark; Ruth Pelton and Eleanor Mears, Asbury Park, N. J.; Pearl Evans, New York City; Katherine Holy, Chicago; Mary Leef and Edith M. Whitton, Alexandria, Va.; Edwina Nolan, Cleveland; and Helene Foster, Newark.

RETAIL MEAT PRICES CONTINUE TO DROP

CHICAGO—Declines in dressed beef prices with corresponding declines in the prices of cattle were features of the meat trade during the month of May, according to the Institute of American Meat Packers.

Demand for dressed beef was slow throughout the entire period and in the last week prices of live cattle dropped to the lowest figure which they have reached for 20 years.

Although prices on some meats were fairly steady during the month, most meats continued to decline at wholesale.

The housewife's food dollar will now buy approximately eight pounds of cured and smoked pork shoulder, or whole picnic hams, whereas at this time last year it would buy only about four pounds.

Comparison of wholesale prices of some meats at the present time with one year ago show the following percentage declines: Dressed beef, 30 to more than 35 per cent lower, according to grade and weight; veal, 33 per cent lower; smoked hams, 16 to 36 per cent lower, depending on weight, and smoked picnics, 35 per cent lower. Lamb prices declined sharply in the early part of 1930, and prices of dressed lamb of cer-

(*Concluded on Page 8, Column 5*)

A. & P. Sales Show Small Decline

NEW YORK CITY—Sales of the Great Atlantic & Pacific Tea Co. for the five-week period ending May 30 were $102,946,053.

This compares with $104,673,214 for the same period in 1930, and is a decrease of $1,727,161, or 1.65 per cent.

More goods were sold during the May period in 1931 than in the same period a year ago, as shown in the estimated tonnage figures.

May sales, expressed in tons, were 563,223 this year, compared with 488,753 in May, 1930. This is a gain in quantity of merchandise sold of 74,470, or 15.24 per cent.

RUTHENBURG SPEAKS TO RETAIL MEAT DEALERS

BUFFALO, N. Y.—Louis Ruthenburg, president of Copeland Products, Inc., Mt. Clemens, Mich., and chairman of the refrigeration division of the National Electrical Manufacturers Association, addressed the New York state chapter of the National Retail Meat Dealers Association, Monday evening, June 8, at the Statler Hotel here. Some 1,500 retail meat dealers from the state attended the annual convention.

KROGER FOUNDATION BOOSTS FOOD SALES

CINCINNATI—Kroger Food Foundation, set up to establish quality standards for its units, officials of the company state, has attracted attention to Kroger products with the result that sales in territories where stores are operated under the company name are ahead of 1930 sales, while sales are decreasing where units are operated under other names.

About 800 of these acquired units still operate under their own names. The Kroger name will be given to these units as soon as conditions permit.

Inventory turnover has been increased to 15 times a year, whereas it was 12 in 1929 and 13 in 1930. Sales on meats and produce have been bringing profitable results, and the company is finding it possible to increase its margin of profit, especially in lines which had been operating at a loss.

Kroger is working out a new vocational education scheme in regards to the personnel problem. The Wilbur Wright School, collaborating with the company, will provide the course to be studied. The course can be completed in three years, and consists of alternating two-week periods in school and in the store, with regular wages to be paid while working.

Cold Desserts Top Summer Menus

This housewife finds that frozen desserts prepared in the electric refrigerator are quite welcome these warm days, and enables her to be ready for emergencies. She uses a Williams Ice-O-Matic refrigerator.

MARTIN INSULL CITES NEED FOR HOME SERVICE

Stresses Importance of Public Relation Work By Women

ATLANTIC CITY—Addressing the Women's Committee Session of the N. E. L. A. convention Wednesday afternoon, June 10, Martin J. Insull, president of the Middle West Utilities Co., said that he counted "as one of this industry's most inspired decisions, that day 10 years ago when it had the wisdom of enlisting its women to spread among the homes of this nation the story of what electric power has done and can do further for the nation's homemakers."

Emphasizing the importance of public relations work done by women employes of the light and power industry, he said: "You have done a great deal in 10 years, but you have barely started. As a matter of fact, this is a work which will never be finished. A new generation is growing up, and they, too, must be our friends.

"You know better than I do what is likely to be the state of mind of the average American woman toward the great intangible organization which she knows as the 'light company,' or, if she has absorbed a few newspaper headlines, as the 'power trust.' She has no way of measuring the fair price for electric service.

"If she hears or reads that it is excessive, she may possibly believe that it is. If she hears a convincing argument that a municipal plant can provide service cheaper, she may be inclined to favor the establishment of a municipal plant. Or, she may be told that a municipal plan would conserve profits for local use, that it would build parks and playgrounds out of profits which now go to some distant financial center.

"All this probably looks quite logical to her. Those who are advocating such

(*Concluded on Page 3, Column 5*)

NATIONAL DAIRY SEEKS PURCHASE OF COAST CO.

SAN FRANCISCO, Calif.—Plans for the acquisition of the Golden State Milk Products Co. of this city have been submitted by the National Dairy Products Corp.

The latter concern would exchange one share of stock for each two shares of Golden State. The Golden State organization would be the largest addition to National Dairy since Kraft-Phenix Cheese Corp. was acquired, operating 65 plants on the west coast.

Opposition to the merger, led by two members of the board of directors of Golden State, indicates a proxy fight between shareholder groups before the arrangement is complete, it is reported.

TULSA PLANT TO PRODUCE SOLID CARBON DIOXIDE

TULSA, Okla.—The Carbonic Products Co., Inc., is constructing a plant at 2308 N. Lewis Ave., for the manufacture of liquid and solid carbon dioxide from natural gas.

The plant, of six-ton capacity, will be steam-driven, using natural gas. Engineering and construction is under the direction of the Jackson Engineering Corp. of Tulsa and the Frick Co. of Waynesboro, Pa. The plant will be in production about July 1.

Officers of the company are: W. B. Moran, president and treasurer; and S. A. Brander, vice president and general manager.

PACKING CO. TO OPEN NEW FOOD MARKET

CINCINNATI—The Peoples Packing Co., operating a chain of 30 meat markets in this city, will open a new store at 4921 Whetsel Ave., Madisonville, a suburb of Cincinnati.

This store, said to be the first of its kind in the U. S., will be designed to eliminate the use of wood entirely. All counters, racks and cases are made of monel metal and glass.

FOUR HUNDRED PUBLIC UTILITIES OPERATE HOME

APPLIANCES IN HOME FOUND PROFITABLE

By Mrs. Ralph Borsodi*

I HAVE been asked to tell you how my household equipment has paid for itself. But it is impossible to do this without first telling you how the home in which we live has paid for itself. I can't talk intelligently about our machinery without talking quite a bit about our home.

Most women think of home as the place upon which they spend their husband's earnings. They think of everything connected with home as being an expense, just as they think that electrical machinery is an expense. They are mistaken about both of these things, and they should be made to look upon the subject in its true light.

During the World War, my husband and I decided that New York City was no place in which to raise a family, so we moved into the country within commuting distance of the city, where my husband had his work.

We purchased what was left of a seven-acre farm located within walking distance of the railroad station. It contained a small frame house, an old-fashioned barn, some tumble-down outbuildings, but none of the improvements to which we had been accustomed in the city. There was no running water, no gas, and no electricity. We began without even the convenience of an automobile.

Electric Range First Purchase

But if life was to be made comfortable, we had to provide all of these things for ourselves, and fortunately the electric current was within wiring distance of the house. Our first purchase was an electric range—a range which we still use—and the day we moved into the little old-fashioned house, the electrician connected the range—even before the house was wired for electric lights.

This proved to be the beginning of an adventure in homemaking of which the purchase of machines and equipment to eliminate drudgery was a principal feature. I say adventure—because I took very few traditions into the home with me.

I had been a business woman; had been in an advertising agency where scientific management was applied; my husband being an economist, everything must be done with a cost system; therefore, my whole state of mind was experimental.

Beginning with the electric range, one after another we purchased an electric water system; a steam pressure cooker, a vacuum cleaner, a dishwasher, a washing machine, an ironer, a polishing machine, an electric incubator and brooder, as well as electrical tools, such as drills, paint sprayers, soldering irons, et cetera.

We purchased not only electrical machinery, but gasoline-driven machinery as well; a circular saw, a tractor, a truck, a concrete mixer, and we are still purchasing machinery. It was perfectly safe to purchase some of these things on the installment plan, because they had an earning capacity in the home and could pay for themselves. And they have all paid for themselves, many times over, in the amount of money they have earned.

The fundamental economic and social principles involved in this experiment of ours have been described in my husband's books. It is sufficient for the purpose of this talk today to say that the development of efficient, foolproof and inexpensive domestic machinery makes it possible for America to enter upon an entirely new trend in homemaking.

Homemaking An Adventure

Real homemaking cannot be regarded as an obstacle between woman and the bridge club or the dramatic society or the country club luncheon, or any of the distracting adjuncts of this modern scene, for then it is martyrdom, and the home a travesty.

But if homemaking can be looked upon as an adventure, and approached in the spirit of the explorer with a definite objective or as the artist with a vision of hidden beauty or as the man of science on the track of a new truth, then the domestic routine suddenly loses its drabness and within their own four walls, women can find a career as engrossing and fascinating as any that may be found in studio or workshop, office or laboratory. Homemaking must be imbued with the creative spirit.

Bread and cake baking, one of the old tests of a woman's social worth, were abandoned when women turned to the bakery and restaurant. They may experiment a revival of far-reaching significance now that electric mixers and thermometers and clock-controlled ovens make it possible.

But I would say that the social status of the home must change, and if women can be made to see that they have an "earning capacity" in the home, it will give their work there a new dignity; if the home can be made to mean something more to them than a disguised dormitory; something which cannot be bought and sold like an automobile or a radio.

It does not necessarily consist of more expensive furnishings and finer modern improvements than the neighbor can afford. And it should be the expression of the composite personalities of husband, wife and children. It is their joint creation in which each has his spiritual as well as physical share. And its presiding genius is the wife.

The basic principle in creating such a home under the economic conditions of today can be stated simply; apply to household work the scientific management and labor-saving machines which man in his quest for material riches has applied to his economic life outside the home.

Scientific Management

By scientific management, I mean that each unit of work, whether day or week, should be carefully planned and scheduled, and that the homemaker should be responsible for instructing the help as to how the task should be performed with the least waste of time, materials and equipment.

Thus the efficiency of a laundress, for instance, can be greatly increased if the housewife can show her how to use the machinery, how to soften the water, how to gauge the temperature and the amount of soap to be used in each suds.

The theory underlying most of the advertising and selling of domestic machinery today is that of persuading the family to expend certain portions of its surplus, or portioning of what it might spend on luxuries, such as automobiles, furniture, clothing, etc., for electrical merchandise.

Stated in this way, it is perfectly obvious that electrical merchandising starts out definitely handicapped. Most of its appeal is utilitarian, and has to do with housework. In point of enjoyment, it cannot be convincingly urged that it is a real competitor of these other things for which the family can spend its surplus money. Yet it is only because of this mistaken theory that the advertising and selling of electrical merchandising has been on a luxury basis.

Women are being told that the ownership of an electric refrigerator adds to their social prestige and is essential in order to keep up with the Jones'. However plausible this may be, similar arguments seem to me silly when applied to laundry machinery and most of the kitchen appliances.

New Merchandising Theory

There is, however, a totally different theory upon which the advertising and selling may be based. Put in one sentence, it means the examination of the family budget for the purpose of seeing how far it is possible to make room for the purchase of electrical machinery by showing the family how to reduce the expenditure for consumer goods.

Obviously, if the purchase of a complete laundry unit involving the expenditure of probably $275.00, can actually reduce the expenditure of family cash in other directions sufficiently to pay for the machinery as well as the cost of the labor which operates the machinery, and of the housewife for superintending the work, a totally different selling problem is presented.

If the sale is approached from this angle it is actually possible to convince the most hard-headed man that investing $275.00 in laundry machinery will pay bigger dividends, after allowing for all costs and depreciation, than putting it into any stock which he might purchase.

It is my claim that women cannot only earn money by using domestic machinery in the home, but that they can pay handsome dividends upon the investment which the home and the machinery in it represents. They can actually create wealth in the home in this way as truly as they could by venturing into business.

Equipment Pays for Itself

Recently, I checked the cost of washing and ironing in a family of five, consisting of two children and three adults. This friend of mine was using a steam laundry for part of her work, and the time of an extra maid for the balance. She was spending about $8.50 per week; $4.50 was spent with the laundry; $3.00 was paid to the maid, and about $1.00 represented the extra depreciation of the clothes due to the commercial laundry.

At my suggestion, she kept the maid; furnished her a complete electrical laundry, and used the $5.50 she saved each week to pay for the equipment. Assuming equipment costing $275, in a little over a year it paid for itself. And each year will show a gross earning of another $275.00. Even if allowance for all costs and depreciation are made, it still remains an investment paying greater dividends than any other of which I know.

Last winter, my husband and I exchanged "homes" with some friends of ours in New York. We spent a week in their city apartment; they spent a week in our country home. We had a week of theaters and parties; they a week of country quiet. Their apartment was one of those tiny kitchenette affairs of which more and more are being built all over the country.

With the drift of population from the country to the city, these kitchenette apartments threaten to become the typical homes of the future. I don't believe they ought to be called homes at all. They are merely places where people reside. They are elaborate and comfortable dormitories or barracks. It is practically impossible to enjoy and to do any of the things we consider most essential in a home in such apartments.

For the great industry in which you are interested, the contrast between these two homes carries a most important lesson. In my friend's little apartment there were only two electrical appliances—a refrigerator and a vacuum cleaner. There were no washing machines; no ironer; no kitchen mixers. In fact, there was neither room for these appliances nor use for them, since all the work which they are designed to do was done for my friends' family outside of the home.

**Address before Woman's Committee Session, Wednesday afternoon, June 10, N. E. L. A. convention, Atlantic City.*

Hotpoint Hawaiian Waffles Score Hit

One of the favorite spots at the N. E. L. A. convention was the Hotpoint booth, where Hawaiian waffles were served. G. A. Hughes, president of the Edison General Electric Appliance Co. faces the camera at the right.

"MODERN ERA" MAKES DEBUT AT ATLANTIC CITY

ATLANTIC CITY — "Modern Era," Frigidaire's new magazine for prospects, made its debut here at the annual N. E. L. A. convention, June 8 to 12.

Printed in colors, the first issue contains a variety of interesting material. Doris Montague has a short story, "Ready for Anything," which contrasts the home life of 1831 with that of 1931. "Where Yuh Going on Your Vacation?" by Carol Willis Hyatt, contains suggestions for picnic lunches.

Historical data on the uses of porcelain is described in the article, "The Romance of Porcelain." Marshall Wayne in an interview with Paul S. Clapp, managing director of the National Electric Light Association, writes about the use of electricity in the home.

"Ten Cents a Meal," by Majorie Mills, tells how economical and health sustaining menus may be arrived at by the housewife. Dr. Lillian M. Gilbreth, director of the Woman's Division of President's Emergency Committee on Employment, writes on diets for the youngster in an article, "Healthy, Wealthy and Wise."

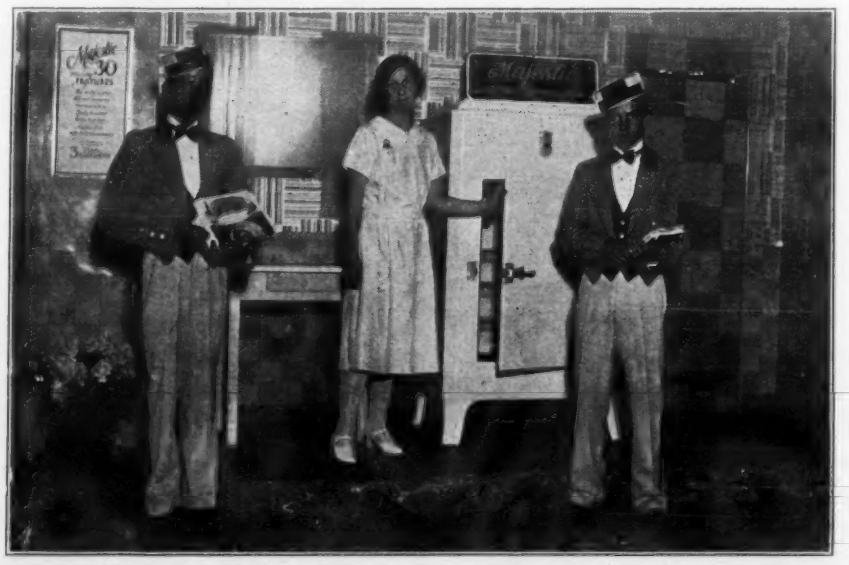
Thirteen recipes are offered by Verna L. Miller, Frigidaire home economist, for use on summer menus.

ICE CREAM MIX SOLD FOR FREEZING AT HOME

COLUMBUS, Ga.—Housewives in this area can now purchase an ice cream mix in groceries, delicatessens and other retail food shops, which is prepared for freezing in a domestic refrigerator by the Bo-Peep Co. of this city.

The Bo-Peep ice cream mix is sold to dealers in wide mouthed, glass containers. It is in an unfrozen state. To freeze it the housewife places the jar in the refrigerator, as no agitation is required during the process.

Majestic Economist On Job



Demonstrations at the Majestic Exhibit during the N. E. L. A. convention were directed by the Home Economist of Peirce-Phelps, Inc., Philadelphia.

HOME SERVICE WORK EXPANDING RAPIDLY

By Clara H. Zillessen*

THIS year marks the tenth anniversary of the Women's Committee. As a member of the original Women's Committee, I can recall those early deliberations as to what should be done first.

It was finally decided to spend one year or two in educating the women of the industry in the fundamentals of the business, and then go out with this to women generally.

But we soon found that by the very nature of things the job within the industry would never be finished, and that we would have to take on the work of public contact later, simultaneously with the educational work among our own women.

The National Women's Committee was organized in 1921, "to put into effect plans for the education of women of the country on the fundamental economic principles of the electric light and power business, and the interdependence of the public and the industry."

Two Methods Employed

Today effort is being made to accomplish this purpose in two ways. 1. Through the entire woman personnel of the industry organized into local Women's Committees; 2. Through the Home Service group.

Since its organization the Women's Committee has effected approximately 800 local organizations of women public utility employes, also called Women's Committees, each one consisting of all women employed by local electric utilities and directed by a permanent or temporary chairman, chosen by the women themselves or by the management.

Regular meetings of these groups are held monthly, semi-monthly, or quarterly. The purpose of these organizations and their regular meetings is the education of the women in every phase of the business, so that they can deal intelligently with their companies' customers, both in their business and social contacts.

At the beginning of each Association year a suggested program of activities is sent to all local Women's Committees by the National Women's Committee. The last yearly program included five general topics for study and discussion. These were: 1. Economics of the Utility Industry; 2. Electricity in the Home; 3. Safety and First Aid; 4. Courteous Service to Customers; 5. Organized Public Contact Work.

It is estimated that 15,000 women took part in these educational programs this year. The strictly educational work has followed through consistently, differently in different parts of the country, with the women looking forward now to the distribution of the employe information booklets as up-to-date data to add to their foundation of fundamentals of the industry.

Ideals of courteous service to customers have been established and women employes have been made thoroughly conscious of the part they must play in order to maintain these ideals.

Educational Work

Another effective part of the Women's Committee work is the Short Courses in Electrical Household Equipment. During the last four years, these courses have been sponsored by the Women's Committee and its geographic units.

These courses, the purpose of which is to give helpful information to women who sell, demonstrate and promote interest in electrical household equipment, have been held at colleges or universities offering regular courses in home economics. They have been planned and carried out by representatives of the colleges and the Women's Committees in the territories, with the assistance of Miss Eloise Davison, home economics adviser, National Electric Light Association.

This year such courses were held at Oregon State Agricultural College, Oklahoma A. & M. College, and Georgia State College of Agriculture.

Home service departments, in charge of specialists in the relation of electricity to home processes, are established in electric utility companies to assist in creating and maintaining satisfactory customer relations and increasing the sale of kilowatt hours to the home, as well as new household electrical appliances.

To assist member companies the home service sub-committee prepared and distributed a manual of 35 pages of helpful suggestions for organizing and operating home service departments. Five thousand three hundred copies of this manual have been distributed.

In 1930 and in 1931 national home service conferences, each attended by more than 220 home service experts from all over the country, were planned

(Concluded on Page 3, Column 5)

**Address by Clara H. Zillessen, of the Philadelphia Electric Co., chairman of the women's committee, before the Public Relation Session of the N. E. L. A. convention, Atlantic City.*

SERVICE DEPARTMENTS - SAYS N.E.L.A. SPEAKER

Electricity Will Be Chief Servant In Home of 1941--Prophesies Speaker

By Loring A. Schuler*
Editor, Ladies Home Journal

THE would-be prophet occupies an exceedingly dangerous position, particularly in a day when the activities of industry are constantly bringing into being so many new devices, devices that very often are so radical that they completely change the course of thinking and of living.

And for one who has lived through the revolutionary changes of the past generation even to attempt to forecast what the next decade may bring forth seems little short of foolhardy.

For we are living in a day of revolution—a revolution in which America once more leads the way. But this is not a war for independence; it is a revolt against drudgery and discomfort; a revolution for comfort and convenience.

Within easy memory we have seen the oil lamp displaced first by gas and then by the electric bulb. Some of us, without being yet in our dotage, can remember when the trolley took the place of the horse car; and today we are seeing the trolley tracks torn up to make smooth roads for busses.

The horse and buggy have been gone for what seems like a generation, though actually we have had the motor car for comparatively few years. The broom has been largely replaced by the vacuum cleaner; the only wash tub I have seen in years was used to plant water lilies in, but the production of washing machines goes ahead by leaps and bounds even when other business is poor.

Advance of Refrigeration

Bulk groceries are hardly to be found, as the grocer's shelves have filled with packaged goods. The ice box is retreating before the steady advance of electric refrigeration, and refrigerator cars and cold storage give us fresh vegetables and fruits and meats at all seasons of the year.

The moving picture has come in, only to be supplanted by the talkie with film in full color. The radio in the shortest time of all has become a household necessity.

We have learned about vitamins and violet rays; mental hygiene has been developed as a sane psychology to promote family happiness; our doctors and scientists have conquered many diseases to prolong the span of life; and year by year the death rate becomes lower.

Some 16 years ago there was published in the *Ladies' Home Journal* an article written by Dr. Charles P. Steinmetz, in which he prophesied with amazing accuracy some of the developments that were then in prospect.

Electricity, he said, would completely revolutionize domestic life. Fire, he said, would be prohibited by law in closely settled districts, and there would be no kitchen ranges and no furnaces in homes.

Instead, he believed, and mind you, this was in 1915, that houses would be heated by electric heaters, controlled by thermostats; humidity would be supplied, and fresh air circulated automatically throughout the dwelling. All cooking, he said, would be done by electricity, and not in the kitchen, but on the dining table itself.

A new device would be added to the telephone, he predicted, by which concerts and speeches would be brought into the home. The motion picture would become the talking picture, and would be viewed in the home rather than in the theater.

The atmosphere would be without smoke. The working day would be six hours long. And electric current would be so cheap that there would be no meters; it would be paid for by the outlet, in the same fashion as water was at that time.

Development Stage

You have already recognized how many are still in the development stage. many of his prognostications have come true, and how many are still in the development stage. As he said, electricity has revolutionized domestic life; we have the electric heater in operation in some favored parts of the United States; cooking is more and more done with the aid of electric current; the loud-speaking telephone that he predicted has become the familiar radio; talking pictures are here, though not yet in the home; and the six-hour day is finding its way into industry by way of the depression in business, and is likely to continue even after the clouds roll by and industry finds itself in a more fortunate condition.

Power, I believe, is vastly cheaper than 15 years ago, and for large users in domestic heating, cooking and other big operations most public-utility companies offer ever more favorable rates.

So it does seem possible to prophesy with some degree of accuracy and though my own predictions of the home of tomorrow may lack the scientific background of Dr. Steinmetz, they are none the less based on observations of trends and tendencies that can scarcely be denied. We have come far in the past 10 years; who can say how far we may go in the next 10?

One thing is sure: The individual home of the future will be more convenient, more comfortable, more livable than any we have known in the past or the present.

This house of the future will have other features to make it more comfortable to live in. It will be insulated against both heat and cold; it will be built to shut out unwanted noises of the street . . . Many of its furnishings will be built in, as an integral part of the house itself, and they will be built for both beauty and comfort.

The kitchen will be a self-contained unit of efficiency — small, compact, planned to save steps and time and labor, with all sorts of modern devices incorporated in their proper places. It is only within recent years that women have begun to demand of architects that their workshops be planned for factory efficiency.

Today the stove, the refrigerator, the sink, the work areas are placed better than ever before; but there is still plenty of room for improvement in the future.

There will be in this house of tomorrow more opportunities for recreation than most of us enjoy at present. The dusty basement will then be a clean playroom for both old and young of the family. Radio and television will be as common as telephones and running water.

In other words, the home will once again be the center of all family activities, instead of being merely a place for sleep and breakfast, as it seems to be in so many cases today.

Nation of Home Owners

Even the purchase of the home of the future will be on a new and easy basis in this desirable time that lies ahead of us. Right now, investigations begun by President Hoover are looking to the elimination of burdensome mortgages and loans, which hang like millstones round the necks of home buyers—and the purchase of a home will be made as easy as the purchase of a motor car or a radio or a washing machine is today. And when this time comes, as it surely will within a few years, America will become a nation of home owners and home lovers, instead of renters and malcontents.

This home of the future will be so mechanized that hand work will be at a very small minimum. No matter then if immigration laws restrict the supply of maids; if household workers prefer the factory to the kitchen.

Already electricity has done incalculable service for us in our homes. It gives us light, runs the radio, pumps the water, keeps the food cold, operates the furnace, cleans the rugs, waxes the floors, washes and irons the clothes, makes the coffee, the toast and the waffles, peels the potatoes, washes the dishes and does many other jobs. . . . But considered from the standpoint of the use that might be made of electric current, all these things together are only a drop in the bucket.

There are three jobs in every home that require a really large use of energy —cooking, supplying hot water, and furnishing heat. In most American homes today these three jobs are being done by other fuels. Yet electricity can do all three efficiently, cleanly and with a maximum of automatic control.

Seventeen million American homes are already wired; equipment is available: the public is sold on the use of electricity. The next 10 years will undoubtedly see these big jobs done electrically by the addition of millions of homes each year.

You have undoubtedly heard the statement made many times during recent months of business depression that what we need to snap us back to better times is a new industry. As a matter of fact, industrial leaders and engineers are right now searching almost frantically for such a new industry—something that will so strike the popular fancy as to put money into circulation and start the wheels of manufacture in new directions.

Many times in the past we have had outstanding examples of the operation of this theory. From small beginnings, new industries have often grown rapidly to great magnitude. The railroads, for example; the telephone; the motor car; the washing machine; the mechanical refrigerator; most recently the radio.

All these, with the single exception of the railroads, have been devices of principal importance in the home, and it is an improvement for the home of the future that we are seeking today. For it is home devices alone that provide a sufficient mass market to make American mass production profitable.

And I venture to predict that such a great new industry, to provide another great improvement in the conditions of living in the home, lies just around the corner, and will come to fulfillment easily within the next decade.

It will be a new, clean, efficient, convenient method of temperature control in the home—by which we shall have heat in the winter and cool air for our comfort in the heat of summer. Electricity will give us this control and this comfort.

Already there is in operation here and there at least one system of house heating by electricity—by which water is heated electrically during the periods of the power-house off-peak load.

Various utility companies have announced rates that run from three-quarters of a cent to two cents for current to be used for this purpose. No furnace, no coal, no ashes—it follows the no-fire specification laid down by Dr. Steinmetz 16 years ago. For the thermostat will be the only furnace man.

And at the same time, engineers are working on a practicable method of cooling homes—just as theaters and some offices and the studios of the big broadcasting companies are cooled today.

Homes Will Be Cooled

So there is every reason to believe that within the next 10 years, dwellings will be ventilated by artificial means, while washed air, heated or cooled according to the season, will be delivered from a central plant.

When that time comes, the home will be hermetically sealed. It will very likely be built of steel and concrete; it will have many more windows than we have today, but those windows will not open.

The glass will admit the precious violet ray of the sun; and the electric lights will be of a beneficient kind to give not only light, but also health. No more colds then from over-heated or under-heated homes; no more rickety babies from lack of sun health; no more uncomfortable perspiring over household tasks.

The question that arises, of course, is this: How fast can we advance in the introduction of new appliances in the home? How rapidly can we come into full enjoyment of this ideal home of the future? And these are questions that I cannot answer for the whole of our people. They must be answered by each individual and each individual family.

Some homes are already completely electrified, so far as present inventions are concerned. Others are lagging woefully behind. And there are probably 12,000,000 homes in which neither light, nor heat, nor power is employed.

Who then should buy, and what, and how much? It is for each individual to say. What are the hardest and most disagreeable tasks? Are there electric appliances that will do these jobs efficiently? Then buy them, the they will pay their way in satisfaction, contentment and happiness whatever the cost may be.

What are the tasks that take longest to do? Will electricity shorten that time? Then buy those devices next, for every minute saved for rest, for recreation, for self-improvement may be reflected in lifetime as well . . . How much money have you to spend? That in itself will determine at least in part what you may have.

The women who hold the family purse strings will know what they want, what they can afford. But make no mistake, it is the women and not the men who are the purchasers of household equipment.

A manufacturer once told me that more than 90 per cent of the mechanical refrigerators were bought by men. I agreed with him that men signed the orders for purchase, because a refrigerator is a major item of expense and therefore is subject to family council; but the sales were actually made to women.

House heaters may be sold to men, because the cellar and the garage are almost the only places in the average home where the husband reigns absolutely supreme; but equipment for the kitchen, for cleaning and washing and ironing, falls always within the 85 per cent of the family income that is spent by the woman herself.

**Address before Woman's Committee Session, Wednesday afternoon, June 10, N. E. L. A. Convention, Atlantic City.*

New Bottle Cooler Displayed

R. B. Ambrose of the Frigidaire commercial department showing the new bottle cooler to a visitor at Atlantic City.

INSULL CITES NEED FOR HOME SERVICE

(*Concluded from Page 1, Column 5*)

a step do not, of course, tell her that a municipal plant is more likely to eat up taxes than to reduce them; that it is more likely to use up park and playground funds to cover a deficit than to create funds for such purposes.

"Again, in this mistaken but zealous enthusiasm, nobody has pointed out that the municipal plant is physically obsolete. Nobody has shown that only the transmission system of the power company can provide service in accordance with modern technical progress.

"Nobody points out that the holding company in the distant financial center does not exist merely to extract profits from the town; that, on the contrary, it has sent money into the town to be invested in service facilities.

"Even when the customer's service is satisfactory, she may be affected by such misunderstandings. Otherwise, how can we explain this puzzling fact; after out 10 most intensive years of serious effort to cultivate public good will, there is a louder clamor than ever about the 'power trust' in newspaper headlines and in legislative assemblies and political offices.

Two Issues Related

"Apparently we have not related the two issues. In the customer's mind we have not associated the benefits they have received from their service, with the broader issues that are being discussed in journalistic and political circles. Let's tell our customers!

"Tell them in terms of their own service. Tell them that when somebody attacks the holding company, he is attacking the means whereby the capital has been raised to provide that service. When somebody urges government ownership, he is attacking the personal initiative and enterprise that has brought that service into over twenty million American homes.

"These questions of the holding company and of government ownership are not abstractions. They are not something separate from the local service that your companies render. They are part and parcel of the broad subject of service—as much so as voltage and continuity of service," he concluded.

HOME SERVICE WORK BY UTILITIES EXPANDING FAST

(*Concluded from Page 2, Column 5*)

and sponsored by the home service subcommittee, to give home service workers an opportunity to discuss their mutual problems.

The number of home service departments of member companies has increased from less than 50 in 1926 to more than 400 at the present time. About 50 of these departments have been created during the last year.

THE SURVIVAL of the FITTEST

UNEMPLOYMENT and wage cuts have reduced the buying power of the country. This is reflected in every line of business. Customers have become fewer—profits less. Competition has become keener than ever before. To exist, retail merchants are fighting for each other's customers. The fittest only will survive.

UNIVERSAL

Ice Cream Making and Dispensing Equipment

was developed at a psychological time. This equipment will enable retail merchants to offer the public ice cream of a superior quality at a lower cost and at more profit for themselves. Dealers are keenly interested. Hundreds of inquiries are being received. YOU can cash in on them in your territory. Write for literature fully describing the business-building, profit-making equipment—the most complete line of its kind on the market.

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Why Home Service?

WHETHER or not an appropriation for a home service department deserves a place in the budget of a refrigeration sales organization is a question upon which the industry seems to be fairly well divided. Not all of the larger manufacturers maintain home economics staffs; many of the younger companies do not. On the other hand a number of distributors have their home service girls, and even some dealers give regular demonstrations of cold cookery. It is reported, however, that manufacturers who are themselves sold on the home service idea often experience great difficulty in convincing a distributor or dealer that home service is worth what it costs.

Under what division of an organization should a home service department be placed? To whom should a domestic science demonstrator report? How can she help a distributor make money? A partial answer to these questions has come recently from the nomenclatures devised by several large refrigeration organizations, which are placing their home service departments in research, customer relations, or merchandising divisions.

Research

One manner of classifying a home economics department is as a division of research. Its function is to discover new uses for an electric refrigerator, to determine the best methods of handling refrigerated food, and thus to arm the salesmen with more sales ammunition.

At present the home economics directors of Frigidaire, General Electric, Kelvinator, and Westinghouse are at work on a manual of refrigeration, attempting to explain refrigerating systems to the housewife in a presentation which she can understand.

This cooperative endeavor is expected to be a boon to the salesmen when his prospect wants to know what makes the wheels go 'round, and when he is faced with the problem of translating the information he learned in sales schools into a story which is intelligible to women who are not mechanically inclined. It will also equip her with knowledge which will serve to prevent fright and consternation when something goes wrong with the mechanism.

Customer Relations

Another common method of classification is that of placing home service staffs under the head of customer relations. It then becomes the object and duty of the girls with recipes to keep satisfied the woman who has purchased an electric refrigerator, to show her how she can save money with it, and help her with that most vexing problem to those who plan meals—varying the menu.

Satisfied users are often good sources of new prospects, sales organizations find, and the most successful sales managers usually have some scheme to keep in touch with the families to whom they have sold refrigerators. The recipe book, complimentary accessories, and similar schemes all work and are all commendable, but those who have tried it claim that few contrivances to make the user happy are better than a personal visit from a home economics expert who can show the housewife how to make a new salad or how to cut a slice out of her budget.

Public utilities have been actively building up home service staffs under customer relations departments for the last four years. When an electrical appliance is sold and installed in the home, the job of the central station has just begun. The utility wants that appliance to be used, and to stay in use. It wants the housewife to be so satisfied with the results that she will not only use that particular appliance regularly, but that she will buy other electrical devices.

Moreover, the utilities are conscious of the fact that of the 24 million customers of the electric light and power companies in the United States, more than 20 million are homemakers. In 1930, these women used some 11 billion kilowatt hours of electrical energy, for which they paid approximately 668 millions of dollars.

The utilities have learned, too, that housewives usually apply for the service, pay the bills, and make the complaints. In a large measure the all-important problem of public relations consists in keeping these women satisfied with the service they are getting.

Therefore the central stations see a great opportunity to cement friendships with their customers by the use of trained domestic science experts who can contact users in their homes, learn their difficulties, and show them how electricity can solve their own particular dilemmas.

Merchandising

Recently a new school of home service workers has arisen. These women are not primarily dietitians or adjusters of complaints. They are merchandisers.

They have sprung up in answer to the demand of hard-boiled specialty selling executives who want to see a definite return in dollars and cents for every expenditure, who want in their organization no individual or no department to which sales cannot definitely be traced (save, of course, such essential divisions as credit and accounting).

When they spend money for newspaper advertising and direct mail literature, they want to know just how many inquiries and how many sales resulted. When they employ a home economics girl and hire a hall for her demonstrations, they want to know how many of the women who attended became good prospects, and how many eventually bought refrigerators.

These men hire girls who spend more time selling than they do testing recipes. They may not actually go out and ring doorbells—although some have women on their staff who do—but when they get a group of women together they put up genuine sales talks.

Woman to Woman

Women of this type are added to sales organizations because they can talk the language of the housewife. They are not concerned with gadgets and mechanisms. They are concerned with food, its preservation and preparation. They know just what accessories will appeal to women, and how to make capital of the handsome appearance electric refrigerators now have.

Best of all, these women understand how an electric refrigerator can save enough money from a housewife's budget to enable her to indulge her desires for "extras," how it can shorten her days and broaden her life, and how it can protect her family's health.

Whatever the classification of the home service woman, whether it be in the research division, in the department of customer relations, or as a merchandiser, she has apparently come to stay in the refrigeration sales organization.

It is the woman who uses the electric refrigerator, and specialty selling companies have learned the advisability of having feminine minds and hands help bridge the gap between the engineers who design and manufacture these machines and the women in whose kitchens they are installed.

An Editor on Wheels

Stories of Interesting PLACES in the Refrigeration Industry

By GEORGE F. TAUBENECK

Atlantic City, N. J.

Three men were standing at the edge of the small balcony in Atlantic City's monstrous auditorium, drinking in the intoxicating symphonic wine of Victor Herbert's "Sweet Mystery of Life," which was being poured into the air by a pipe organ at the other end of the auditorium.

For some moments after the air had ceased to live with the vibrant organ tones, the three stood silent. Then one of the trio noticed an illuminated globe which shone above the stage at the far end of the huge arched room. On this globe were three letters: WPG. A moment's thought produced the significance of the letters: World's Play Ground.

That should have provoked a discussion, for the three men, confirmed itinerants (one was a world-traveled economist for a large public utility, a native of the South; another was a wayfaring journalist from the Middle West; the third was a native New Englander, an advertising man who has seen much of Europe) had been talking animatedly about cities and locales.

Somehow they found in Atlantic City little to mull over, to vivisect. True, each had an impression.

The economist thought the seafood obtainable was commendable from the standpoints of both excellence and variety.

The advertising man liked the little balconies which overhung the Boardwalk; they reminded him of some he had seen in Castilian provinces.

The Middle Westerner was impressed by the fact that there is a lot of water in an ocean.

Beyond these scattered mental imprints the trio found little upon which to compare notes. Atlantic City, to them, was a shell—a gaudily painted statue without motion or life. It was one of the few places in the world in which one could discover all there was to be learned by taking a sightseeing tour.

Of the self-adopted title, "world's playground," it might be said that while "world's" may be extravagant, "playground" describes it exactly. A playground, you know, is designed for the amusement of children.

In the days of short pants and hair ribbons, a county fair or a street carnival was an exciting event. Atlantic City is a permanent county fair, a comprehensive street carnival.

Its chief feature is its Boardwalk—an elevated wooden promenade, skirting the seashore for five and one-half miles.

On the inside of this walk is a heterogeneous assortment of hot dog stands, confectioneries, salt water taffy establishments, small movie "palaces," astrologers, mind readers, auction sales, souvenir shops, bath houses, apparel shops, seafood restaurants, hotels, shooting galleries, penny arcades, and peep shows.

Between the Boardwalk and the ocean is a beach, where bathers disport themselves in the sun. Jutting out into the ocean are a number of piers which contain permanent exhibits of manufacturers, dance halls, cinema shows, mechanical "rides" (a la Coney Island), and the like.

A typical pier offers the following amusements: an embalmed whale, relics of the World War and of the Byrd Antarctic expedition, singing Hawaiians, diving Hawaiians, a diving horse, marionettes, a gilded girl and horse in tableaux, boxing cats, and a collection of Indian arrowheads and other fossiliferous remains.

Most notable are the gigantic electrical advertisements. A big GE symbol at the far end of one pier is inescapable. The merits of Forhan's, Camels, Chesterfields, Heinz 57, and other nationally advertised products are extolled in an electrical game with the sky as the limit and 20-ft. letters as the ante.

Spectacular, if not authentic, is the Coca Cola flasher "sign." It begins with a little man lighting a skyrocket, which zooms up into the air and bursts into a shower of incandescent winks.

Unlike a skyrocket, which pauses for effect at the top of its flight before releasing its cascade of varicolored sparks, this electrical skyrocket begins to shower before the missile has quite touched its ceiling.

Just off the Boardwalk are a number of night clubs which offer second-rate orchestras, occasionally good food, tiresome masters of ceremonies, and choruses composed of former Broadway toasts now relegated to the shelf and the accumulation of avoirdupois, and ambitious youngsters "on the make" who are often comely and talented enough to make a visit worthwhile.

When not dancing in a "revue," these girls are available as dancing partners. Price schedules haven't been revised since the summer of 1929.

A sign outside one of these clubs is typical:

ZABLE'S SEAGLADES
Atlantic City's Largest, Coolest, Most Beautiful, and Smartest Supper Club.
Presenting
The Greatest, Most Elaborate, Stupendous, and Spectacular Entertainment from New York City.

Three notable Atlantic City institutions:

SALT WATED TAFFY. Comes in many flavors, forms, and price classes. No trip to Atlantic City is complete without mailing a box home. More are purchased for mail delivery, attendants say, than are taken away personally by the customer.

BOARDWALK. Described meagerly above. Two or three strolls a day on these famous planks and you are "all tuckered out." Covered wheelchairs (glass-enclosed when rain comes), pushed by perspiring negroes, are plentiful and much patronized by those who essay to see the sights along the Boardwalk.

AUDITORIUM. Justly deserving of all the praise it gets. Mammoth, well planned, well built. Its acoustic properties are amazing, and it has undoubtedly one of the finest amplifying systems in the world. Built by the city to attract conventions. Has an unsupported arched roof which vies with the Armory at Champaign, Ill., for the title of world's largest.

Atlantic City is a gay, catch-penny, parasitic, non-productive spot which exists largely for the entertainment of holiday visitors. It is a place to week-end, to find cheap amusements, to become tired quickly.

Behind the Boardwalk is a small city of honest, home-loving, daily laboring men and women much like those to be found in any other small city along the Atlantic seaboard. The city seems to be well managed, has its modicum of churches and public institutions, and is quiet and comparatively law-abiding.

Not many visitors, however, ever get past Atlantic City's glittering, tinselly, raucous front. This front, the Boardwalk and its immediate environs, is the Glorification of Ballyhoo.

Bloomington, Ill.

Like most Illinois towns and cities, Bloomington is a place where farmers congregate on Saturday afternoons. It is also a place where factory workmen get pay checks on Saturday.

An agricultural center, an industrial center, and an educational center, Bloomington provides considerable variety in a comparatively small area.

It knows Main Street, with its booster manifestations, civic pride and loyalty, catch-all social functions, and gossip blanket. It also knows the Caravans of Commerce, and understands something about foreign markets, gold points, transportation problems, and fluctuations in raw materials.

In common with his country cousin, the Bloomington factory worker can have room to stretch out, clean air to breathe, fresh produce to eat, freedom from annoyance.

Analagous to his small town brother, the Bloomington citizen can enjoy the fruits of neighborliness, can labor without strain, can be spendthrift with leisure hours.

Unlike the metropolitan laborer, the Bloomington machine-tender often has learned about sales campaigns, export factors, budgets, competitive practices, national advertising programs.

His boss, with whom he may have gone to school, delights in taking him backstage and showing him the shifting of the scenery.

ACTIVITIES IN HOME SERVICE FIELD

COLD FIRST COURSES, SUGGESTS DUNNING

By Mrs. Phyllis K. Dunning
Home Service Director
The Society for Electrical Development

AT THIS season of the year a cold first course seems particularly appropriate. Chilled cocktails and hors d'oeuvre give a welcome, summery atmosphere to meals and form a very satisfying contrast to the succeeding hot courses.

It is the first principle of the successful cocktail or hors d'oeuvre that they be served very cold. So we simply put into the refrigerator the glasses in which the first course is to be served, and chill them along with the food they are to contain.

Then, at serving time, the glasses and food are removed from the refrigerator, the food placed on the table as quickly as possible. It's little stunts like this which make one thankful for one's electric refrigerator, and doubly thankful that it is of a size sufficient to cope with unusual demands.

Because we like the feeling of luxury which it gives us to be able to decide at the last minute just what kind of appetizer we will serve, we keep in the electric refrigerator an assortment of appropriate materials for making sea food or fruit cocktails, or a simple plate of hors d'oeuvre.

Here are a few of our favorite first courses. We hope you'll like them.

Tomato, Sauerkraut Juice Cocktail

If you wish, you can use the purchased tomato juice cocktail to make this, but we find that the sauerkraut juice dominates the flavor so much that it is unnecessary to use this comparatively expensive tomato preparation.

We do not like the so-called plain "tomato juice" either, as it is too thin. For best results strain a can of tomatoes through a coarse sieve and then through a fine one. If the resulting mixture seems very thick add a little water to it, but this will be necessary only with heavy-pack tomatoes.

Chill thoroughly in the electric refrigerator. A bottle of sauerkraut juice cocktail should also be placed in the refrigerator to chill.

At serving time combine two portions of tomato juice with one portion of sauerkraut juice, shake well and pour into chilled glasses. Serve at once.

Iced Fruit Cocktail

1 fresh pear
½ lb. white grapes
1 banana
1 orange
½ pint orange sherbet

Cut up the fruits, skinning and seeding the grapes, mix them together, and place them in a covered bowl in the electric refrigerator. At serving time put some of the fruit mixture into the bottom of a chilled glass, add a spoonful of sherbet on top and send to table at once.

Cantaloupe Cocktail

Mix together the required amount of cantaloupe balls, one-fourth that quantity of seeded, pealed grapes and a few halved maraschino cherries.

Pour over all a little of the cherry juice, add a dash of lemon juice, and sweeten with powdered sugar. Place in a covered bowl in the electric refrigerator to chill thoroughly. Serve in chilled glasses.

Hors D'Oeuvre

Arrange on a chilled plate several kinds of relishes. A favorite one with us is made up of one or two small stalks of celery stuffed with Pabstette or cream cheese; one slice of fresh tomato on which is placed half of a devilled egg; two or three small sardines; a spoonful of potato salad on a lettuce leaf; radishes and stuffed olives.

Remember that every one of these things must be chilled in the electric refrigerator for at least two hours before serving to be at their best.

Minted Grapefruit Cocktail

Cut a grapefruit in half and loosen the pulp from the rind and partitions using a sharp knife. Do not cut out the center, but remove all the seeds. Cut out every fourth section of grapefruit and replace it with a wedge-shaped slice of mint jelly. Sprinkle with sugar and chill thoroughly in electric refrigerator.

Lobster or Crabmeat Cocktail

You will need but 1½ tablespoons of flaked crab or lobster meat for each serving. At serving time combine the chilled crab or lobster with a little hard-boiled egg chopped fine, a small quantity of finely shredded crisp lettuce and moisten with bottled cocktail sauce. Serve in chilled glasses.

WATERBURY DEALER CLOSES FIVE WATER COOLING JOBS

WATERBURY, Conn.—The Modern Home Utilities has installed General Electric water coolers for the American Brass Co., Healey & Healey, Waterbury Nash Co., Waterbury Printing Office and the Waterbury Savings Bank.

Cooperative Exhibit Features Electric Refrigerators

The Bureau of Power and Light, Los Angeles, maintains a cooperative exhibit for appliances, including refrigerators. No appliances are sold and names of prospects are turned over to dealers.

SPEAKERS AT FOOD SHOW TALK ON REFRIGERATION

NEW YORK CITY—Housewives in this territory had an opportunity to learn the latest in cooking recipes and housekeeping arts of this nation and other foreign countries at the Summer Food Carnival held by the New York Edison Co., June 1 to 5.

Each afternoon was devoted to food lectures, several of which were given by representatives of refrigeration companies.

On the opening day, the German food demonstration was in charge of Henri Hausli, managing chef of the Hotel St. George in Brooklyn. James Ferrel of the Copeland Refrigeration Co. of New York, spoke on modern food storage. Frozen foods was the subject covered by George Troutman of Swift & Co.

August Espezel, executive chef steward of the Hotel Carlyle, had charge of the French food demonstration on Tuesday. "Getting the Most Out of Your Electric Refrigerator," was the subject of Lawrence E. Mulloy, personnel director of the Kelvinator Sales Corp.

The third afternoon session was devoted to Jewish foods. Carl Wentz, catering manager of the Garment Center and Capitol Club, was the principal speaker. Lawrence R. Hill of the General Electric Co. gave hints about cooling summer drinks.

Italian foods were demonstrated and prepared by C. L. Zucca, restaurant operator, for the Thursday afternoon audience. Miss Edwina Nolan, home service director of the General Electric Refrigeration Department, was a speaker at this meeting.

Seafoods were taken up at the final session, with Mrs. Ida Bailey Allen of the Atlantic Coast Fisheries, putting on the demonstration. Miss Jeanne Adair of the Frigidaire Home Economics Department, spoke on "A New Technique in Cookery."

Members of the New York Edison Home Economics Bureau put on daily demonstrations at the show.

FINDS WINDOW DISPLAYS GOOD SALESBUILDERS

LOS ANGELES (UTPS)—According to E. E. Lawrence, manager of the George E. Belsey Broadway Department Store downtown branch, window displays have proven effective salesbuilders, as has the recent electric appliance show staged by the store itself the first week in May.

Miss Alice Robertson, G. E. home economics demonstrator, held a number of cooking classes during the show and demonstrated G. E. refrigerators as well.

An electrical appliance and refrigerator exhibit sponsored by the Belsey organization was held recently at the Hollywood branch of the Broadway, also with Miss Robertson as demonstrator.

GENERAL FOODS ANNOUNCES 'RADIO KITCHEN'

NEW YORK CITY—A "radio kitchen" has been opened here by the General Foods Corp. from which their bi-weekly food broadcasts will be made. The kitchen is fully equipped from both electrical and dietetic standpoints and is expected to add realism to recipes and radio talks.

Louisville Show Draws Crowds

LOUISVILLE, Ky.—A four-day exhibition of electric refrigerators held recently by the Louisville Courier-Journal, was so successful that dealers and distributors plan to make it an annual event, rivaling the automobile show.

Approximately 3,000 visitors attended the show the first two days, and though the exhibit did not open till noon, people began coming at 9 o'clock and there were 400 persons in attendance before noon on the second day.

Electric refrigerators were displayed by the following firms: A. H. Thompson Co. (Frigidaire); J. Bacon & Sons (Majestic); Bensinger Outfitting Co. (Majestic); Sutcliffe Co. (Norge); Stewart Dry Goods Co. (Norge); Electric Refrigeration Co. (General Electric); Central Furniture Co. (Leonard); Gas & Electric Shop (Leonard); Peaslees Gaulbert Corp. (Servel); Kaufman-Straus Co. (Servel); Weis Outfitting Co. (Servel); Albert Hess Furniture Co. (Servel); Stratton Terstegge Co. (Kelvinator); Bomar-Summers Hardware Co. (Copeland); Sears-Roebuck (Coldspot); Rhodes-Burford House Furnishing Co. (Starr-Freeze); Rudolph Wurlitzer Co. (Mohawk and Chieftain); Tafel-Williams (Westinghouse).

HAWAIIAN WAFFLES

ATLANTIC CITY, N. J.—While a real Hawaiian ensemble strummed guitars and chorused gaily, visitors to the Hotpoint booth at the N. E. L. A. convention were served with waffles by girls dressed in hula costumes. The recipe for these Hawaiian waffles follows:

4 eggs
1 pint milk
3½ cups flour
¼ cup sugar
2 tablespoons baking powder
1 teaspoon salt
½ cup melted butter
¼ cup oil

Beat eggs and milk together. Sift dry ingredients. Beat dry ingredients into first mixture until thoroughly blended. Add fat and beat thoroughly. Preheat the Hotpoint waffle iron. Sprinkle fresh grated cocoanut in the grids. Pour on the waffle batter, close the grids, and bake.

'THRIFT IS MAJOR BUYING APPEAL' -- SAYS TUCKER

BALTIMORE—Thrift constitutes the major buying appeal upon this year's crop of electric refrigerator prospects, according to M. F. Tucker, sales promotion manager of the local Frigidaire branch.

Mr. Tucker recently completed a comparative study between the present approach used by Frigidaire salesmen in Baltimore, which is based upon thrift and that used one year ago. The returns indicate that thrift is a much better appeal.

In 1930 a salesman made 10 calls from which he made five contacts and got five interviews and three prospects. In 1931 a salesman making 11 calls (and using thrift as his approach), made 11 contacts, got 11 interviews, and six prospects. The comparison was as fair as it was possible to make, Tucker says.

ST. LOUIS BAKER VALUES ELECTRIC REFRIGERATORS

ST. LOUIS—(UTPS)—A booster for electric refrigeration in the bakery is Herman Sauselle, owner of the Shaw Bakery at 1818 Thurman Ave. The Zerozone St. Louis Co., Inc., installed electric refrigeration in Mr. Sauselle's bakery recently.

Not only does he have abundant ice water for baking purposes, but he also can sell cream filled pastries during the summer months, if he so desires. Last summer cream filled pastries were banned by the St. Louis City Health Commissioner.

"Electric refrigeration allows me to work several days ahead," Mr. Sauselle said. "I can mix my dough and keep it in the refrigerator for several days without injuring its baking qualities. On Thursday I can start preparing for the 'heavy' Saturday rush and make that day considerably easier."

SPECIAL NEWSPAPER SECTION FEATURES REFRIGERATION

MILWAUKEE, Wis.—The Sunday, May 24, edition of the Milwaukee Journal contained six pages of news and advertisements of the electric refrigeration industry.

It was called the "Home Refrigeration" special section. Kelvinator, Servel, Ice-O-Matic, Copeland, Westinghouse, G. E., Majestic, Mayflower and Mohawk refrigerators were advertised.

Announcement was made of the introduction in Wisconsin of the Mayflower, distributed by the Shadbolt & Boyd Co. Michael Ert, Inc., is local agent for the Mohawk.

DISPLAY STUNT AIDS REFRIGERATOR SALES

SAN FRANCISCO—Edna Kirby, "the girl who lives in glass houses," recently spent virtually 24 hours a day in the windows of the Sterling Furniture Co. A complete living room and bedroom was installed in the east windows of this store while a model kitchen in the west windows included two Copeland electric refrigerators.

By means of a "mike" and loud speakers everything that was said in the windows was broadcast to the hundreds of persons congregated on the outside of the store.

From 10 in the morning until 9:30 at night interested spectators were constantly congregated before the store windows watching Miss Kirby dine, receive callers, entertain herself and callers by radio and piano, arise in the morning, and retire at night.

At stated periods during the day, Miss Kirby entered the model kitchen and before the crowds of window shoppers received instructions on the design and operation of the Copeland refrigerator and other kitchen equipment.

This was done so informally that it proved to be one of the most entertaining features of the week. Miss Kirby was served breakfast, lunch and dinner in the windows by the Clinton Cafeteria (whose establishment is located nearby). The food was brought into the store and placed on a table in the kitchen.

For lunch Miss Kirby was usually served a large salad direct from the refrigerator. This salad constituted the main portion of lunch.

The floor of the model kitchen was covered with Armstrong linoleum specially selected to harmonize with the merchandise displayed in the kitchen, while along the wall there was black oil cloth which made the white refrigerators stand out in an effective manner.

At 9:30 each evening Miss Kirby said "good night" to the onlookers and retired to her bedroom, her maid closing a large curtain which extended between the living room and bedroom. At 10 the next morning the Chinese maid opened the curtains, Miss Kirby awoke and was served breakfast in bed. (Of course all changes of garments were made behind screens).

CARBONDALE COMPANY GETS CONTRACT FOR JOB

LOS ANGELES—(UTPS)—The Board of State Harbor Commissioners has recently awarded the contract for the new addition to the State Refrigeration Terminal at Pier 46 to the Carbondale Machine Co., of 1031 S. Broadway here.

The Carbondale Machine Co. recently completed a large storage and fish freezing plant for the Pacific Coast Terminals, Ltd., at New Westminster, B. C.

CLEVELAND DAIRY TO BUILD PLANT IN ASHTABULA

CLEVELAND—The Telling Belle-Vernon Co. plans to erect a $60,000 milk pasteurizing plant in Ashtabula.

The Cleveland company has purchased the plant of the Ashtabula Pure Milk Co. and will use the equipment for storage purposes, it was announced.

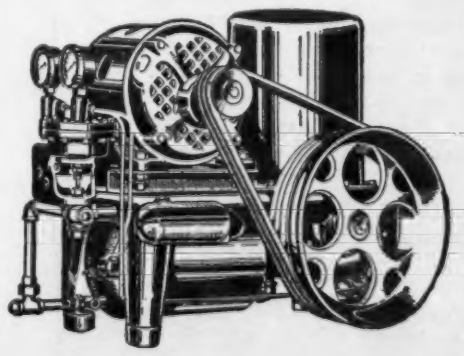
A Vast Sales Market Ready for You

Merchants everywhere need compact, dependable, efficient commercial units for their display counters, refrigerators, florist boxes, ice cream cabinets, etc. You can greatly increase your sales volume and profits by selling the New Carbondale Excelsior Refrigerating Machines.

You can sell them with entire confidence knowing that they are thoroughly perfected and practical commercial units.

Every Excelsior becomes a permanent fixture of the store in which it is installed, soon repaying the original cost and having a big resale value over a period of many years.

The Excelsior line offers you new opportunities for business expansion and profits. May we tell you the rest of the story?



THE CARBONDALE MACHINE CO.
Main Offices, Carbondale, Pa.
Address inquiries to Excelsior Division, South Norwalk, Conn.

DAYTON MERCHANTS INSTALL EQUIPMENT

By E. L. Toedtman

DAYTON—"Our customers realize the advantages of electric refrigeration equipment more than we do," said Harold R. Sloan, of the new Drummond and Sloan Market, which has been opened at Far Hills Ave.

"In our older store," Mr. Sloan added, "we formerly used ice, and we knew the difficulties it presented in refrigerating our foods. So a few months ago when we planned our new market we decided to install electric refrigeration."

The Drummond and Sloan store, which has both market and grocery departments, is equipped with a 12-ft. McCray top display case for meats, a large McCray grocery box for butter, cheese, milk, etc., a 6 ft. McCray top display case for poultry, and an 8x6x10 ft. walk-in cooler for meats.

Refrigeration equipment was supplied by Trupar Mfg. Co. of this city.

In addition to the elimination of added trouble and expense, Mr. Sloan says his meats are kept at least 40 per cent better by electric refrigeration than by ice. He finds that his customers appreciate the fresh, sanitary condition in which food is kept, and his only regret is that he did not install a larger display case than the 12 ft. one now in use.

The Messler and Co. Grocery & Meat Market at 700 Bolander Ave., is operated by four brothers, who all agree that their new electric refrigeration equipment is a decided help in building a large volume of trade. The Messler boys formerly used ice.

Some two months ago they installed a McCray 12 ft. porcelain display case for meats and a complete walk-in cooler of the same make for butter, cheese, milk and other foods. An Arctic ice machine cools both the case and cooler.

Both installations were made by the G. E. Kent Co., Dayton and southwestern Ohio McCray distributor, which has display rooms at 110 East Second St.

COPELAND-KANSAS CITY CO. REPORTS THREE JOBS

KANSAS CITY—Nathan Baraban of the Copeland Refrigeration Co. recently installed a walk-in cooler to refrigerate 300 gallons of milk daily on the farm of George Jorgenson, dairyman of Overland Park, Kan. A special tank was used with two multiple valves and 86 C. coils operated by an XA compressor.

The Colored Detachment Barracks at Leavenworth has also been equipped with Copeland refrigeration. A No. 15 Copeland Spear water cooler, using a 1½ hp. XA compressor will cool drinking water for the 300 men. A storage box was also installed in the Barracks restaurant.

The restaurant at the Municipal Airport in Kansas City has been Copeland equipped. A water cooler and a grocery box with a special milk compartment on one side are used in the Union News restaurant.

DRY-ICE OPENS DISTRIBUTING STATION IN TULSA

TULSA, Okla.—The Dry-Ice Corp. of America has opened a distributing station at 215 N. Detroit St. here.

Charles T. Longaker of the Sales department is in charge. Shipments to the Tulsa station are being made in carload lots from the plant at Peoria, Ill.

NEW HAVEN CO. INCORPORATES

NEW HAVEN, Conn.—A. Tassi & Co., 866 Congress Ave., manufacturer of refrigerator cases and other store equipment, has been incorporated as the Tassi Fixture Mfg. Co., Inc.

Brigida Tassi is president and treasurer; Maria Sarti, vice president; and William Pevetti, secretary.

Live by the Sea and Live Longer

HOTEL STRAND

Pennsylvania Ave. and Boardwalk
Atlantic City, N. J.

LOW RATES UNTIL JULY 1

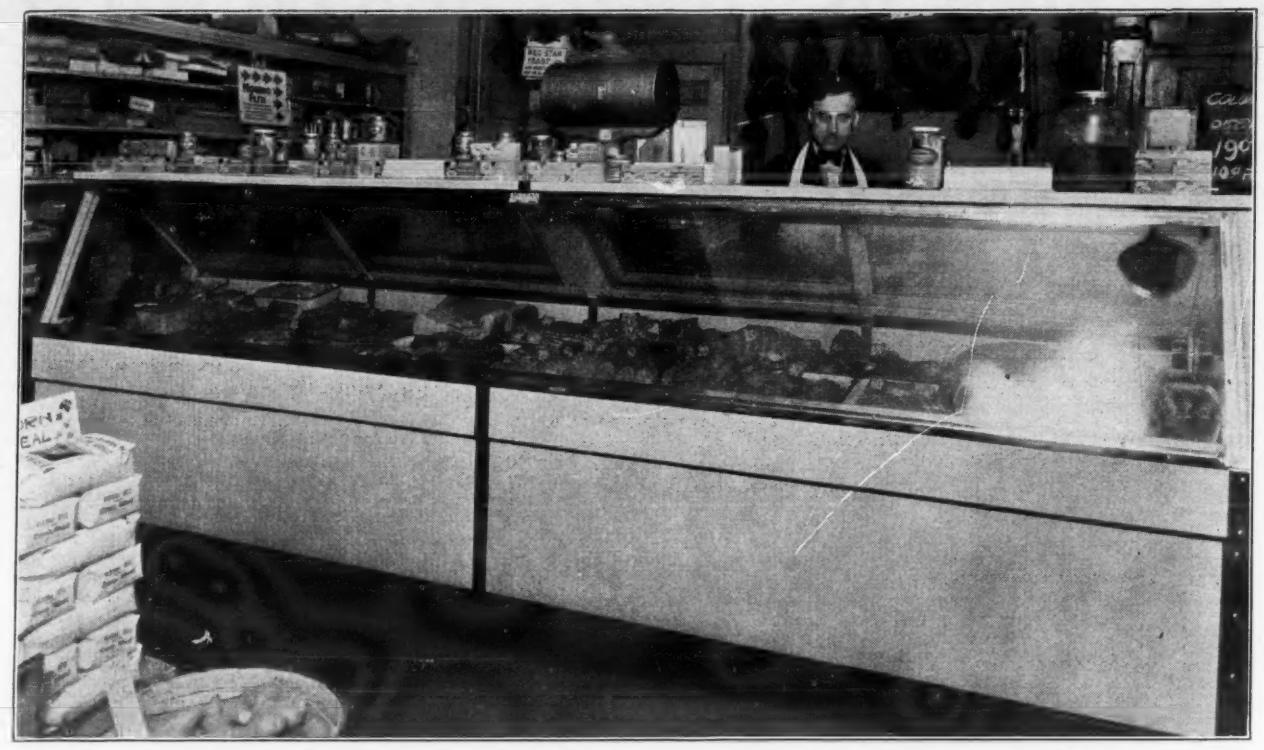
Live on The Famous Boardwalk for $7 per day, single, for room with private bath and three STRAND MEALS. Double, $14. Special weekly rates. European plan, if desired. Leave the din of the city behind and let the ocean ozone build you up.

SALT WATER BATHS
COMPLIMENTARY TEAS DAILY
COMFORT—SERVICE

Bathing Privileges. A Splendid Hotel
On the edge of the ocean

THOS. E. RANDOW, *Manager* — H. B. RICHMOND, *Proprietor*

'Equipment Helps Business', Say Messler Brothers



The Messler Brothers of Dayton are strong boosters of electric refrigeration in the market.

WADSWORTH CLOSES LARGE AKRON INSTALLATION JOBS

AKRON, Ohio — Frigidaire cabinets, water coolers, ice cream cabinets and flower display cases were in operation May 18, when the new $3,000,000 Mayflower hotel was opened to the public here.

George Wadsworth installed two 10 cu. ft. household cabinets in the presidential suite and the governor's suite and a 6 cu. ft. in the managerial suite.

President Hoover is expected to occupy the larger suite in June when the largest blimp in the world will be christened by officials of the U. S. Navy at the Akron airport.

Other Frigidaire installations at the Mayflower include a 10-hole ice cream cabinet for the main kitchen; a 6-hole cabinet for the banquet hall kitchen; water cooling and soda fountain in the Puritan room (coffee shop). A triple glass floral display case was also placed in the Henry Fritch Floral Co.

When Dettling Bros., Akron's largest seed store decided to add flowers to their line, they, too had a triple glass flower display case installed by Frigidaire.

Wadsworth recently sold a 12 cu. ft. refrigerator to Zeppel Inn, a new motor inn near the Akron airport, and also installed two storage cabinets at Lakeview Inn, one cabinet for bottled goods and one for meats.

A Frigidaire room cooler was sold to the Kaase Bakery Co. to keep the temperature in the chocolate dipping room of the candy department at 60°.

CHICAGOANS EQUIP MIAMI BEACH HOMES

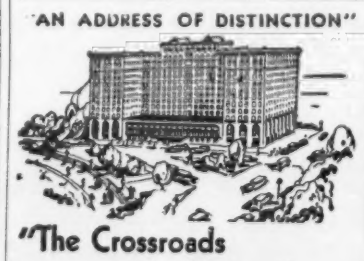
MIAMI, Fla.—(UTPS)—Leon Sigmun, president of the Scottish Woolen Mills, Chicago, has built a Winter home on Miami Beach, in which has been installed a specially built model BX20-20 de luxe General Electric refrigerator.

This order was secured by R. W. Brown, senior salesman for the Geo. Patterson, Inc. of Miami. In addition to this large cabinet two smaller units were installed.

Harry C. Moir, president of the Morrison Hotel in Chicago, has equipped his Winter home at Miami Beach with a General Electric DX18 De Luxe model.

The order was secured by J. H. Wilson of the Miami organization, a cabinet member of the Toppers' Club.

"AN ADDRESS OF DISTINCTION"



"The Crossroads of a Nation"

THE logical meeting place of those who appreciate the superlative in foods... elegance in accommodations. THE DRAKE Travel Bureau helps relieve you of travel detail. *Rates begin at $4 per day. Permanent Suites at Special Discounts.*

THE DRAKE
HOTEL, CHICAGO
Under Blackstone Management

Newspaper Stages Exhibition

DAYTON, Ohio—Keen interest was shown by Daytonians and prospective users of electric refrigerators of the entire Miami Valley in the recent electric refrigeration show held by the *Dayton Daily News* and the *Dayton Herald* in the Dayton Industries Bldg. and the Home Store. This was the first project of its kind ever presented in Dayton and the apparent success of the undertaking was manifest in the interest shown and it is quite obvious that it will be conducted each year until it has established a precedent.

At the show in booths conveniently adjacent and all on one floor, many makes of electric refrigerators were shown and demonstrations in cold cooking were given each day by experienced attendants.

Frigidaire, General Electric, Mayflower, Kelvinator, Westinghouse, Majestic and Electrolux refrigerators were displayed.

KANSAS UTILITY CO. MAKES HOSPITAL INSTALLATION

HAYS, Kan.—The new $250,000 wing of St. Anthony's Hospital was equipped recently with eight General Electric refrigeration units, two water coolers and six refrigerators, one domestic model and five commercial.

The new addition has ample facilities for 110 adult patients, in addition to a modernly equipped nursery. The three larger commercial models were installed in the main kitchen of the building and the others were placed in diet kitchens and in the new nursery. The installation was made by Central Kansas Power Co.

ST. LOUIS CANDY COMPANY USES SERVEL SYSTEM

ST. LOUIS—Both perishable foods and candies are protected by electric refrigeration in the new store opened in the downtown area by the Amy Smith Candy Co. of this city.

Raw and prepared foods are stored in a Federal refrigerator, cooled with Larkin coils and a Servel machine. Equipment was installed by the Mack Electric Co., Servel commercial dealer.

This, as well as an auxiliary store on Locust St., is fitted with a candy storage vault refrigerated by Servel. Display cases also are mechanically cooled, maintaining a temperature sufficiently low to prevent disintegration of the creams, but not too low as to break down the chocolate structure.

In order to maintain various temperatures in cases, counters, vaults, and kitchen storage box separate thermal expansion valves are used.

"The summer of 1930 taught us a great lesson on the value of mechanical refrigeration for the candy business," says Mrs. Smith. "Our girls dipped creams in a 60° box when the surrounding temperatures were around 100°, and our refrigerated cases permitted us to display chocolates on 115° F. August days without loss from melting."

The Fred Schmeckebier Candy Co., which provides the Smith company with hard candies and holiday specials, guards against unusual weather conditions by refrigerating the wholesale storage room with Servel equipment.

DEFIANCE MILK CO. FORMED

DEFIANCE, Ohio—The Defiance Milk Co. has been incorporated here with a capital of $150,000, it is reported. The incorporators are Albert F. Diehl, John C. Diehl, and Harry S. Vroman.

NEW PACKING PLANTS PLANNED IN ITALY

MILAN, Italy—Three new refrigerating stations are planned in Italy to care for the continually increasing export trade in fruit and vegetables, according to J. M. Kennedy, assistant U. S. trade commissioner at Milan.

The proposed new plants, which probably will be located at Milan, Bologna and Palermo, will be elliptical, in order to construct longer unloading galleries.

Each plant will be divided into three concentric zones, a maneuvering room in the center, a circle of refrigeration in the intermediate area and the unloading gallery along the outer edge of which it will be possible to place external working rooms.

The maneuvering room will be fitted with an electrically operated turntable for bringing in and distributing refrigerating cars. The circle of refrigeration will be divided radially into eight galleries for cars and into as many more for the conservation and pre-refrigeration of goods. The unloading gallery will consist of a covered road over which vehicles can pass for unloading into the rooms.

On the outside of the gallery will be the working rooms for firms that wish to prepare their goods on the premises.

Advantages claimed for the new type of plants are: rapid handling, in limited space, of large numbers of cars; confining the cold within a circular area with but slight loss of refrigeration; easy expansion of loading and unloading areas; and an efficient working cycle.

The Verona plant, erected in 1930, is capable of preparing 112 cars of merchandise for shipment in 24 hours, using six-hour shifts.

GENERAL FOODS ORGANIZES NEW CANADIAN SUBSIDIARY

MONTREAL—Organization of a new subsidiary, Minute Tapioca Co., Ltd., with headquarters and factory in this city, is announced by General Foods, Ltd., Canadian affiliate of General Foods Corp.

General Foods, Ltd., has also opened new divisional headquarters at Winnipeg, Manitoba, to direct distribution of all General Foods products in western Canada, according to an announcement by R. K. McIntosh, managing director. Activities in this territory will be under the direction of J. C. Creighton.

SAPP NOW ARMOUR CO. GENERAL MANAGER

CHICAGO—Warren H. Sapp has been appointed general manager of the Armour & Co. plant here, it has been announced. Mr. Sapp was formerly assistant comptroller of this company and was lately elected president of the Illinois Manufacturers' Association accounting division.

CLEVELAND STORES ADOPT SUMMER SCHEDULE

CLEVELAND—A. & P., Fisher's and Kroger stores here have announced that starting June 1 their food stores in greater Cleveland will close at 1 p. m. on Wednesdays and at 9 p. m. on Saturdays.

Market Buys Zerozone Cooling Plant

Refrigerating equipment installed by Zerozone-St. Louis, Inc., cools walk-in cooler and display cases in Jewson's Market at 1101 Hodiamont Ave., St. Louis, Mo.

Refrigeration Plays Part In Rapid Rise of Roadside Stands

By Charles B. Barr

STRATFORD, Conn. (UTPS) — Mechanical refrigeration is playing a prominent role in the rise of the "lunch-cart," or "diner" as it is now termed, from the status of a humble eating place for laborers to that of a glorified cafe.

The story of the diner is one marked by hamburger sandwiches, favorite between-meals "bite" of the humble, but menus in the dining cars of today are beginning to bear the legend "chopped steak" instead. And that—as much as any other factor, bears witness to the diner's climb into the ranks of the elite.

Terms such as "lunch-carts" (or car) "dining car" and "diner" originally indicated the portable nature of this type of restaurant as well as its railway coach-like construction. The modern diner is shipped from the factory complete, even to salt-cellars and napkin-holders, and is set up on a permanent foundation, often with a cellar underneath.

The Boston Post Road in New England has lately attracted a number of these car-like restaurants.

Inasmuch as all dining cars have need for modern refrigeration, the market afforded the refrigeration industry is rapidly growing. While some of the "cars" are shipped with all refrigeration installed, many merely contain the cabinet, with the responsibility of installing a unit left up to the owner.

In Bristol, Conn., one of the most modern type of diners, is known as the "Boulevard Grill." This structure is nearly 100 ft. long, contains 15 individual booths and a small dance-floor in one end. About 85 patrons can be accommodated at one time. The car was built by the Bixler Mfg. Co. of Norwalk, Ohio.

Refrigerator cabinets in this diner were built by the Belding-Hall Co. and consist of a 25 cu. ft. serving refrigerator back of the counter and a large kitchen box.

The serving box has a large ice-making capacity. There are two salad trays under the main counter, built in by Belding-Hall, and a Copeland water cooler with storage capacity of six gallons and cooling capacity of eight gallons per hour.

In the basement a 1 hp. Copeland Model X-1200B condensing unit, provides four different temperatures. The serving refrigerator for short orders is cooled by a No. 30 Coldhold which also furnishes 324 ice cubes per freezing.

The kitchen refrigerator, used largely for storage, has a Model 53G Larkin coil. The temperature in this box is slightly below that of the short order cabinet.

Two other temperatures are required for the salad traps and the water cooler. Special coils, made up from ½ in. tubing, were installed to cool the salad trays.

The Copeland equipment in the Boulevard Grill was installed by the New Haven Electric Co., 131 St. John St., New Haven, Copeland distributor for Connecticut and western Massachusetts. The sale was made by H. K. Blatchley, wholesale representative of the firm.

Diners containing private booths are the only types which will be popular in the future, in the opinion of George Navickas, proprietor of the Boulevard Grill.

He emphasized the fact that his diner attracted a different group of customers from that generally associated with restaurants of this type. The small dancing space in one end of the structure has resulted in bringing a large roadhouse trade. Music is furnished by phonograph records.

The Post Road Grill in Stratford, a suburb of Bridgeport, contains 7 individual booths. A Kelvinator unit, installed by the General Service & Equipment Co., Kelvinator dealer in New Haven, provides refrigeration for a large cabinet installed by the makers of the diner.

Frigidaire equipment is in use in a number of diners in the Connecticut area. In Bridgeport, the Park City Grill, which opened last fall, is equipped with a Seeger cabinet of 25 cu. ft. capacity, cooled by a Frigidaire C compressor. This diner was built by the Paterson Vehicle Co., Paterson, N. J.

The Fairfield Diner, Fairfield, a Bridgeport suburb, uses Frigidaire equipment. Both of these jobs were installed by the Downes Smith Co., Frigidaire dealer of Bridgeport, under the direction of Kenneth D. Woundy, service manager.

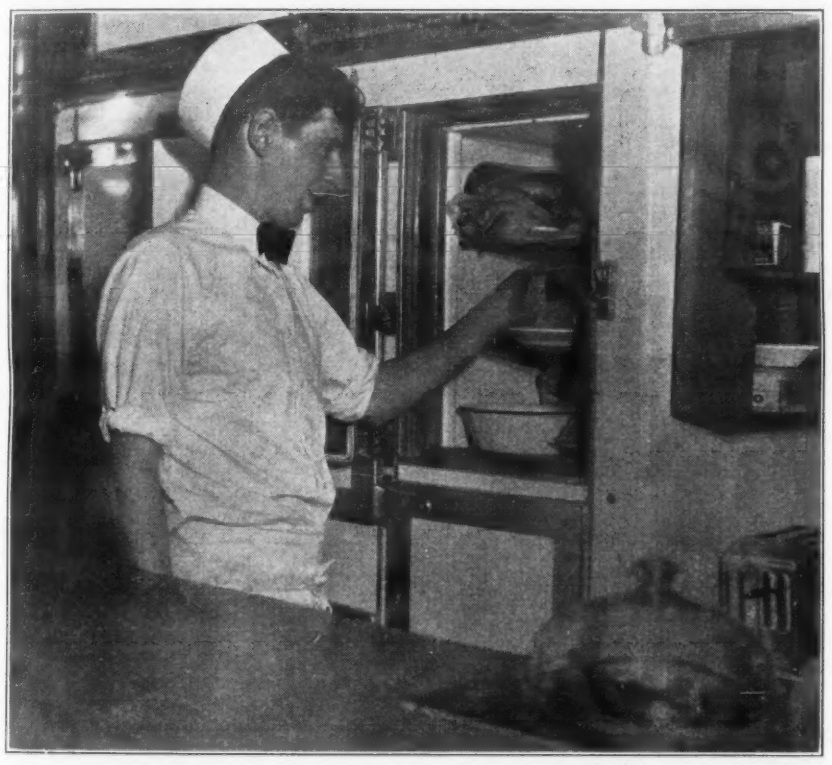
The humble hamburger sandwich, mentioned previously, had much to do with the increase in mechanical refrigeration installations in these eating palaces of today.

Before the era of mass production set in all branches of industry, countermen were accustomed to keeping a slab of the chopped steak in the icebox, and when a sandwich was ordered, to tear off a quantity, mould it with the hands, and make the sandwich.

Now, however, with more particular patrons entering the car-like emporiums, it is customary to make up a large quantity of hamburg sandwich fillings at the beginning of the day.

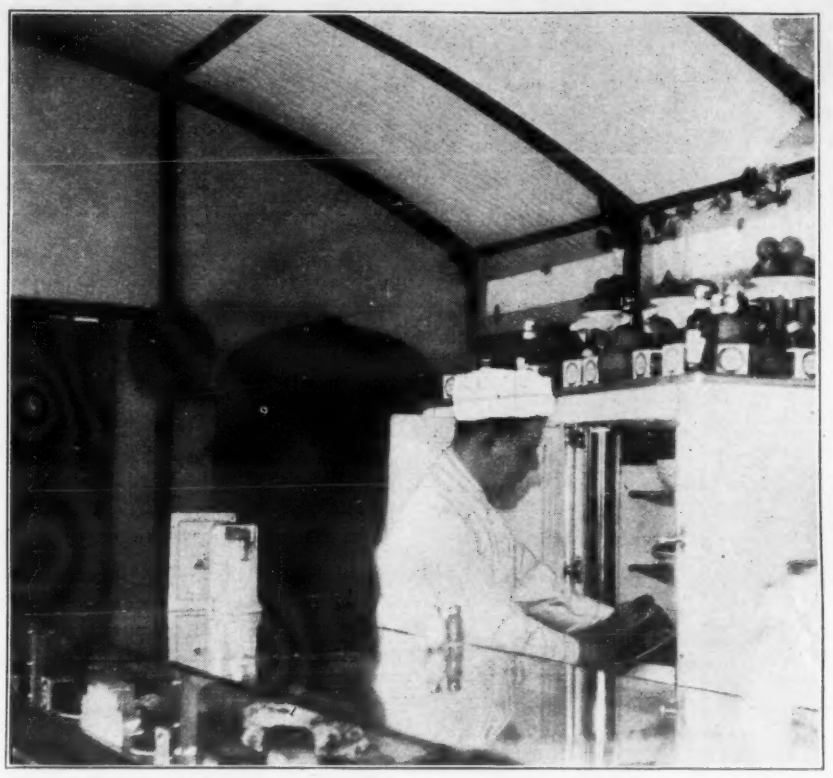
Each moulded bit of meat is placed in its own individual tissue paper wrapper, and the "packages" are then piled neatly in the refrigerator. Thus the slapping and pounding in front of the consumer is eliminated and the effect is much more appetizing.

Frigidaire, Seeger Equipped



This Seeger cabinet, cooled by a Frigidaire unit, is doing service in the Park City Grill, Bridgeport.

Copeland Cools Foods



Drawn from the chilly depths of the refrigerator, a chicken comes to rest in the hands of a counterman in the Boulevard Grill.

Farm Board Cites Reasons for Action Against Ohio Dairy Farms

COLUMBUS, Ohio—The Federal Farm Board has recently issued a statement explaining its reasons for taking a $416,000 judgment against the Ohio Farmers Co-operative Milk Association and declaring a willingness to aid financially in the reorganization of the association.

The board is favorable to making loans to the newly organized cooperative in "reasonable amounts" and under certain conditions the statement said.

The statement in part, follows:

"In accordance with the provisions of the agricultural marketing act, the board made, on Oct. 11, 1929, a loan of $400,000, secured by a first mortgage, to the Ohio Farmers' Co-Operative Milk Association.

"When the association found that it was unable to meet the payments of interest and principle due on this loan, it suggested that, in view of this debt and other obligations, a receivership proceeding would best assure the protection of its creditors and a continuance of the cooperative marketing of milk in the Cleveland area.

"After this statement from the association, the government instituted its action for the liquidation of the association through a receivership.

"Producers and others interested in this cooperative movement have indicated a desire to undertake the reorganization of the milk producers of the Cleveland territory into a cooperative for the marketing of dairy products.

"The board has given consideration to the problems arising from such a reorganization, and is favorable to making loans to the newly organized cooperative in reasonable amounts, provided a plan satisfactory to the court, the producers, the creditors and the board is worked out. No final action has as yet been taken upon such a plan.

"Board conferences have been attended by the following representatives of the association: A. C. Cawrse, president; Paul P. Elliott, secretary; H. L. F. Reger, Frank Bishop and Charles Smith."

UNGER, WHITMORE ADVANCED BY GENERAL FOODS

NEW YORK CITY—Arthur C. Unger, western division sales manager of the General Foods Sales Co.; Ralph H. Whitmore, Pacific coast division manager; and John K. Evans, eastern division manager, have been elected vice presidents of this organization, according to a recent announcement.

TO MAKE FLAVORING MATERIAL

NEW YORK CITY—John V. Klocklov has been engaged by the Belgian Trading Co. of this city and will have charge of the manufacture of non-alcoholic synthetic flavoring materials for candy and ice cream. Mr. Klocklov was formerly chief chemist for M. R. Rodgers & Co., Seattle, Wash.

DEALER PLACES TWO LARGE COMMERCIAL MODELS

MIDDLETOWN, Conn.—Hall's Music & Utilities, Inc., General Electric refrigerator dealer, has recently installed two 45 cu. ft. commercial cabinets, of the CS-450 type, one in the Alpha Delta Phi fraternity house at Wesleyan University and another in the delicatessen store of John Bury at Moodus.

E. G. Linderme is refrigeration manager for the concern.

EDMUNDSON OPENS NEW STORE

HOUSTON, Texas—A one-story brick show room with windows 10 ft. high on three sides of the building, has been opened in this city by the Edmundson Refrigeration Corp., distributor of General Electric refrigerators.

Although there are several domestic model refrigerators on the floor, the new display room is primarily for commercial showings.

DAIRY TO BUILD PLANT

CEDAR RAPIDS, Iowa — The Co-operative Dairy Co. of this city has awarded a $40,886 contract for the construction of a dairy plant here to J. W. Hopp Construction Co., it is reported.

NOW READY—A NEW BINDER FOR FILING BACK ISSUES OF THE NEWS

Often you want to refer to a news item, an illustration or an article which was published in the NEWS. How handy it would be to have back copies neatly filed in a manner which would make it easy to find what you want—and to find it quickly.

New binders are now ready. Thirty-six metal retaining strips are provided (the old binders have only 27), to allow for filing separately the individual sections of the paper if you wish. The metal retaining strips are easily inserted at the middle pages and secure the paper without "pinching." Every page lies flat and all type matter is easily readable.

"ELECTRIC REFRIGERATION NEWS" is neatly stamped in gold on the top cover and on the back edge of these handsome binders. The stiff covers are made of good quality black imitation leather.

When you want to refer to something published in a back issue, a flip of the finger brings the information before you. Buy a binder!

Shipped postpaid upon receipt of $3.75.

ELECTRIC REFRIGERATION NEWS
550 Maccabees Bldg., Detroit

ICE CUBES GET NEW JOB IN THE HOME

By Buelah Canterbury

THOUGH most women now know that electric refrigeration and the home preservation of food go hand-in-hand in their households, not so many are aware of an important beauty secret hidden in their electric refrigerator for use in their own boudoir.

According to Mrs. Johanna Ellis, secretary of the Ohio Beauty Salon Operators, the little cubes of ice made in the electric refrigerator can do considerable in beautifying and rejuvenating faces, necks and hands.

Mrs. Ellis explains "just how" these ice beauty-cubes may be used. She advises a good cleansing with cold cream after a day in the office, on the links, shopping or housework.

When the cream has been wiped off, an ice cube, held in a soft piece of old linen should be moved gently over the face in an upward rotary movement.

This ice application stimulates tired facial muscles, induces better circulation, closes the pores, is soothing to the nerves and gives the skin an exhilarating glow and freshness.

"The daily use of ice cubes on the face and neck is the best insurance I know against the sagging muscles, wrinkles, crow's feet and 'turkey-neck,' those age-tales that will appear on all faces if care is not taken," Mrs. Ellis says.

ARMOUR ADOPTS 5-DAY WEEK

CHICAGO—A new five-day week plan has been inaugurated in the Armour & Co. plants, according to a recent announcement. The latest branch to go under the new system is that at South St. Paul. Kansas City, Kan., and St. Joseph, Mo., plants are now operating on this schedule.

The SMARTEST COFFEE SHOP in DETROIT

Hotel Fort Shelby's Coffee Shop is a unique restaurant where the service and equipment enable you to dine leisurely, or, if you wish to hurry, you may be served as quickly as you please . . . popular prices . . . open for breakfast, luncheon or dinner. ¶ Hotel Fort Shelby's 900 units are servidor equipped and paneled—all have private bath. Rooms as low as $3.00 per day . . . suites $10 and upwards.

Motorists are relieved of their automobiles at the door without service charge. Write for free road map, and copy of "Aglow with Friendliness," our unique and fascinating magazine.

HOTEL Fort Shelby
E. J. BRADWELL, Manager
DETROIT
"AGLOW WITH FRIENDLINESS"

PEARSON GETS FOUR ORDERS IN ONE DAY

By W. J. Miller
Field Representative,
Copeland Products, Inc.

AUBURN, N. Y.—Sales of four commercial installations, valued at almost $4,000, in a single day is the record made recently by George Pearson, Jr., of the Smith & Pearson Hardware Co., Copeland dealer operating under the B. I. Cooper Sales Co., Inc., of Syracuse.

Pearson started the day with the sale of three commercial installations to Mr. Doan who owns and operates four markets in Auburn. A year ago he installed a Copeland commercial in one of his markets.

Pocketing this order, Pearson started out for more business, and at 6:30 in the evening sold his fourth installation to Lindsley's Market of Auburn.

The order for Doan's Markets consisted of two Model XA-1200-B Copeland units, one Model WA-825-B Copeland unit, six No. 65-C Copeland coils and two No. 4-T Copeland coils. The order for Lindsley's Market called for one Model XA-1200-B Copeland unit and two 106-C Copeland coils.

How could four installations, worth almost $1,000 each, be made in a single day? How could the requirements be estimated in that time, and how could the cost be figured, let alone making the sale? These were queries submitted to Pearson by the writer.

"There seems to be a feeling on the part of many people that there is something difficult about selling commercial equipment," Mr. Pearson said. "The fact is that it is not necessary to be an engineer to specify and sell commercial equipment. There is nothing complicated about it at all.

No Mystery Now

"During the early stages of electric refrigeration it was a mystery. A salesman who knew refrigeration, especially commercial refrigeration, was considered an engineer. And a service man who could install and service an electric refrigerator was a 'wonder.'

"It is highly interesting to contrast the difference in selling commercial equipment in the early days and selling this type of equipment today. In the 'good old days' a salesman selling commercial installations had to spend several hours in a prospect's market, catching the water which came through the drain from the melting ice in a given refrigerator for a given period. With a complication of figures and B. t. u.'s he arrived at the kind and size of equipment to sell his prospect.

"Just as practically all complicated engineering problems are figured out in Trautwine's manual, the factory engineering department has provided similar engineering information based on extensive tests run on various coolers, cases and refrigerators.

"Tables are provided which, when referred to after measurements have been taken and requirements determined, give the kind and size of equipment needed for the particular purpose.

"In the case of an entirely new and different kind of application altogether, this is a problem that would have to be determined both by the refrigeration engineers and the engineers of the organization for whom the installation was to be made. These unique installations are too rare for any salesman or dealer to have to bother about until he is called upon to make one. Then is time enough to find out how to figure it.

"For example, in estimating the requirements for a walk-in meat cooler having normal service with no additional load due to freshly killed meats to be stored, the salesman or dealer would get the following information:

1. Height, width and depth of box (outside measurements).
2. Thickness and kind of insulation.
3. Room temperature (cooler location).
4. Desired cooler temperature.
5. Temperature of condensing medium (city water temperature if water cooled, or temperature of room if air cooled).

"In regard to item No. 1 above, it is only necessary to refer to the engineering charts furnished and the number of square feet outside surfaces will be shown. You then refer to the coil specifications under the heading in this case, 'Market Coolers.' From this you select the coil or coils which have an equal or greater number of square feet of vertical cooling surface as the square feet of surface on the outside of the box to be cooled.

"In other words, the coil should have as great or greater number of square feet of cooling surface to extract and transmit the heat from the inside of the box as there are square feet of surface on the outside of the cooler which admit the heat units into the cooler.

"By referring to the tables in the egineering book, you will find that a cooler 8 ft. wide by 6 ft. deep and 9½ ft. high will take a coil having 369 sq. ft. of surface for the cooler which has 362 sq. ft. outside surface.

"To determine the ice melting equivalent, one refers to the chart in the engineering manual under 'Market Coolers.' Having the information required in items No. 3 and No. 4 above, it is only necessary to subtract the one temperature from the other to get the temperature differential on which to base the estimate of condensing unit capacity required.

"For example, with a room temperature of 87° and a desired cooler temperature of 37°, the difference is 50° in temperature between the room and that desired on the inside of the cooler.

"In regard to item No. 1 above, if you know the thickness of the insulation (cork board or equivalent), the number of square feet outside surface and inside temperature desired, the chart in the manual will show you the amount of ice melting equivalent required for this installation.

"All Copeland condensing units are rated with ice melting equivalent for a given operating time, which should be a normal operating time during a 24-hour period. You only have to select the condensing unit (either water cooled or air cooled, as desired) under the column of the known temperature of the condensing medium with a rating equivalent to the required ice melting equivalent as given by the chart.

"Estimating the cost of the installation is simple. Knowing the kind of equipment required by following the foregoing instructions, it is only necessary to refer to the price list of the equipment needed.

"To this is added the cost of labor, based on the time required to make the installation and any work that may be necessary in connection with it, together with the customary profit.

"As to cost of operation, figures I obtained from one user showed that a Model XA condensing unit operating 16 hrs. a day consumed 23.2 Kwhs. at a cost of six cents, which would amount to $1.39 per day, equivalent to $3.06 worth of ice at 40 cents per hundred pounds. This is a saving of $50 a month during the summer. In the cold months the saving is about one-half of this amount, or $25 a month. This is a yearly saving of approximately $500 in operating costs only.

"In the case of the installation in Mr. Doan's first market, a careful record kept by him showed savings with his installation as compared with ice for one year's operation, after charging off operating cost, interest and depreciation, of one-half the purchase price of the refrigerating equipment.

"In most cases an average meat market will pay for the equipment in from two to three years in savings over the cost of ice."

Copeland Salesman Equips Auburn Market

Lindsley's Market of Auburn was one of the four equipped by George Pearson, Jr.

Reese's Food Shop Uses Frigidaire

Frigidaire equipment was recently placed in operation in Reese's Food Shop, Canton, Ohio, to cool perishables kept in the display case, walk-in cooler and grocer's refrigerator.

COLD STORAGE PLANT TO BE ERECTED ON FARM

MIDDLETOWN, Conn.—Construction of a cold storage plant to hold 40,000 bushels of fruit is being planned by Lyman Brothers of Middlefield, fruit growers.

Plans for the building are now being drawn up, and construction is likely to start this summer. The Lyman farm produces annually about 40,000 bushels of apples and 10,000 bushels of peaches.

FIG GROWERS SEEK BACKING

HOUSTON, Tex.—Possibilities of the fig growing business will be pictured to Houston business men and financial leaders, who will be asked to aid in a stabilization program, with a view to gaining recognition as one of Texas' major industries.

Sales for the year have been steady and the 1931 crop should be readily marketed, the fig men say, if the proper support and advertising are given.

RETAIL MEAT PRICES CONTINUE TO DROP

(*Concluded from Page 1, Column 2*)
tain grades are now nearly 40 per cent lower than those prevailing 18 months ago.

The export trade in meats was rather quiet during the month.

In the United Kingdom, the market on meats was slow, although there were some increased sales of hams. Prices, however, were lower than those prevailing during the month of April. Sale of other cuts of meat was extremely light, due in part to continued heavy importation of Wiltshire sides and other cuts of pork from the Continent, where production continues extraordinarily heavy. Sale of lard in the United Kingdom were heavy, but the price declined and at the close of the month was below parity with the domestic market.

On the Continent, the market on both meats and lard continued very dull, with little selling for immediate or future shipment.

In the domestic market, trade in pork products was fair. Prices were generally somewhat lower in May than in April, and as the month closed the prices showed a further declining tendency. Sales of cooked ham and sausage showed the usual seasonal increase, although cool weather during the month curtailed business to some extent.

NEW ENGLAND INN BUYS COOLING EQUIPMENT

GREAT BARRINGTON, Mass—Berkshire Inn, purchased recently by Major Hugh Smiley, has been equipped with Kelvinator refrigerators. The installation includes one Model L-21, two Model L-44 and one Model L-68; two walk-in coolers, one for meats and the other for vegetables, an ice cream cabinet and a fish chest.

Major Smiley owns the large Fenton Brook Farm in West Egremont, having a dairy equipped with electrical devices, and milk put under refrigeration there is transferred, along with other farm products, to the inn, to be served to patrons.

ALASKAN COLD STORAGE PLANT LEASED BY FISHERIES

KETCHIKAN, Alaska—An option for lease of the Ketchikan Cold Storage has been secured by J. E. Berg, directing manager of United Pacific Fisheries and associates.

TO HELP YOU MAKE MORE SALES

If you are a manufacturer, distributor, or dealer, you can use the *Refrigerated Food Section* as a definite aid in the promotion of commercial sales. Simply see that it reaches your commercial prospects.

In the *Refrigerated Food Section* will be found news and information of interest to meat merchants and grocers, chain store executives, ice cream manufacturers, druggists, confectioners, restaurant owners, and all food service establishments.

Your prospects will be better informed on the advantages of up-to-date refrigeration equipment by reading the *Refrigerated Food Section.*

Use the blank below to order extra copies for distribution by your salesmen. Or send to ELECTRIC REFRIGERATION NEWS the names of companies to which you would like to have sample copies sent.—Editor.

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Engineering Section

In Three Parts
Part Three

ELECTRIC REFRIGERATION NEWS

Registered U. S. Patent Office.

The business newspaper of the refrigeration industry

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TWO DOLLARS PER YEAR

SERVICE CHIEFS GET ACQUAINTED AT ATLANTIC CITY

Majestic, Westinghouse, G. E., Servel Engineers Meet at Luncheon

ATLANTIC CITY, N. J.—Service engineers from several of the refrigerator manufacturers met each other and talked over common problems and methods of handling service in their various organizations, at a luncheon, June 11, at the Claridge Hotel here. The meeting was arranged by ELECTRIC REFRIGERATION NEWS during the N. E. L. A. convention here last week.

The gathering included three General Electric engineers, F. M. Corliss of the product division, H. T. Hulett, commercial engineer, and W. M. Timmerman, manager of the commercial engineering division, all from Cleveland. Grigsby-Grunow was represented by F. J. Corneil, field engineer from Chicago, and H. M. Threlkeld, field engineer from Los Angeles.

S. R. Cooper, Servel educational director from Evansville, Ind.; W. K. Gordon, Westinghouse division service manager, Norristown, Pa.; and J. T. Schaefer, enginering editor of the NEWS, completed the assemblage.

Recollection of common acquaintances and stories by Mr. Cooper in his own inimitable fashion, amused the company during the luncheon.

Since the preparation of service manuals, and the setting up of service stations was one of the chief activities of several of the men, methods and plans for these jobs discussed. In some instances, they arranged to exchange service manuals.

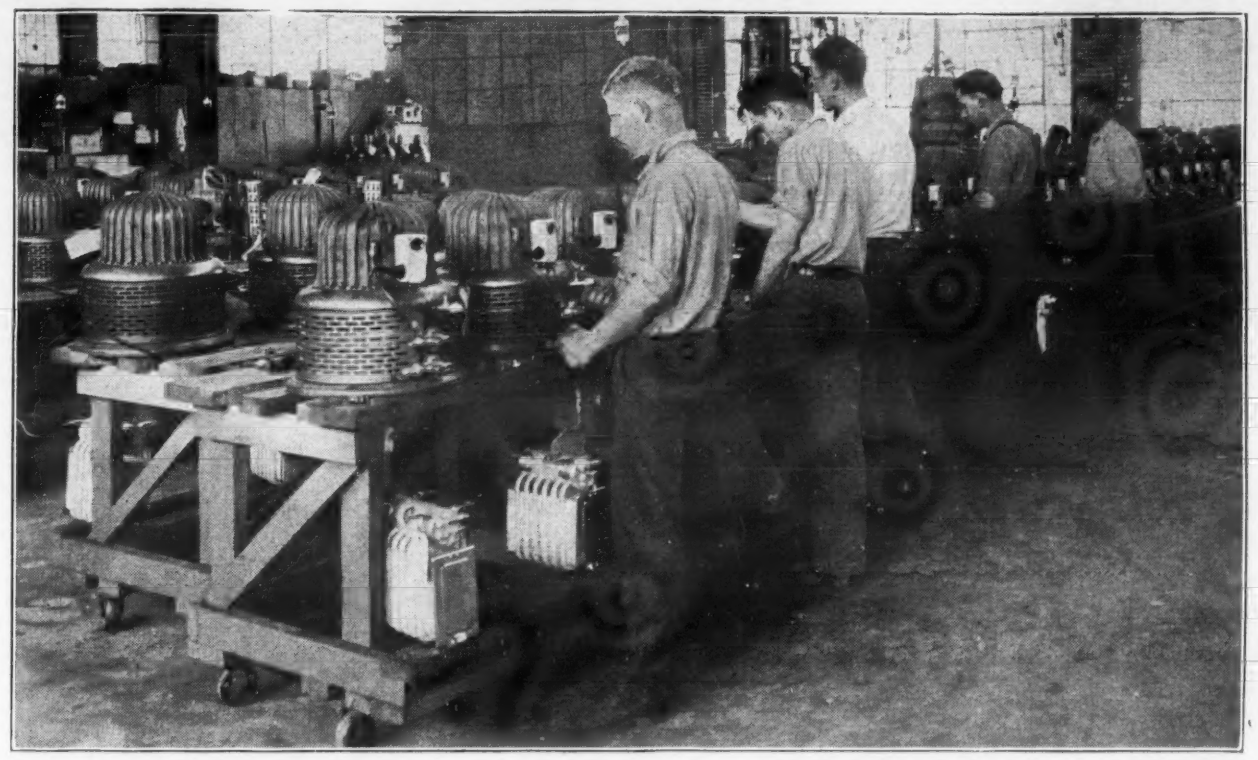
Refrigerator installations on lines of odd voltages and frequencies presents a problem to many engineering departments. For 220 volts alternating current, Servel furnishes a 220 volt motor, while General Electric installs a step-down transformer. In cities where 25 cycle current prevails, the usual procedure is to provide a motor to run at that frequency.

The problem of installing machines on direct current lines is met by using a d. c. to a. c. converter. Discussion of field educational work which keeps these men on the road much of the time from October through March, concluded the meeting.

NEW BEVERAGE COOLER USES FRIGIDAIRE MACHINE

CINCINNATI—Sixty-six half-pint bottles can be cooled in the self-contained beverage cooler recently introduced by the Gertner Mfg. Co. of this city. It will cool a case of beverages from 80 to 40° F. in an hour, according to the announcement. The cooler is equipped with a Frigidaire condensing unit.

Inspecting Ice-O-Matic's Capitols



Workmen inspecting condensing units at the Williams factory in Bloomington, Ill. Night shifts are being employed in several departments of this plant.

HARRY BUNDY, HEAD OF TUBING CO., DIES

DETROIT—Harry W. Bundy, chairman of the board of the Bundy Tubing Co. here, manufacturers of "Bundyweld" tubing used by the refrigeration industry, died suddenly of heart disease on June 2, at his summer home at St. James, Beaver Island, in upper Lake Michigan.

At the time of his death, Mr. Bundy was 53 years old. He was born in Minnesota City, Minnesota, which he left at the age of 14 to go East, shortly entering the employ of the Drop Forging Co. of Springfield, Mass. In 1900 he became superintendent of that company.

He came to Detroit in 1906, where he has been chiefly interested in the invention and manufacture of devices for the automotive industries. From 1912 to 1918 he was factory manager of the Diamond Mfg. Co. here.

The machines now used for the lateral rolling of "Bundyweld" copper lined and steel coated tubing are of Mr. Bundy's invention. In 1922 he organized the Bundy Tubing Co. which furnishes this product.

N. Y. ENGINEERS PLAN OUTING

NEW YORK CITY—Members of the New York section of the A. S. R. E., with their families or sweethearts, will gather on Wednesday, June 24, for their annual picnic and outing at Mazda Brook Park, Parsippany, N. J.

Frigidaire Open House Attracts 51,200, June 2-5

DAYTON—A total of 51,200 visitors passed through the big Moraine plant of Frigidaire Corp. here during a four-day "Open House," held from June 2 to 5, inclusive.

Originally scheduled for only three days, the period was extended an extra day to care for the large number of visitors who came from every section of the Miami Valley, as well as from Dayton to inspect the latest production methods used by this General Motors subsidiary.

From the receiving of raw materials to the crating and shipping of finished products, the guests were privileged to view the entire manufacturing methods used in the production of Frigidaire household models.

Special arrangements were found necessary to accommodate the unusually large number of persons who crowded around the Frigidaire porcelain plant, regarded as the largest in the world, to watch the white porcelain finish being fused on steel at a temperature of 1,600° F.

A special nursery, set up to care for the small children of plant visitors, did a thriving business, and came to be one of the many spots of interest in connection with the open house. Women visitors all were given cards exchangeable for souvenirs.

SPREEN APPEALS APPLICATION TO HIGHER PATENT COURT

WASHINGTON, D. C.—(UTPS)—A decision of the United States Board of Patent Appeals denying a patent to Charles C. Spreen, Detroit, for inventing a mechanical refrigerator has been appealed by Spreen to the United States Court of Customs and Patent Appeals, the highest patent court in the country.

His appeal is scheduled for hearing in Washington during the fall sessions of the court, which commence Oct. 1, it was announced.

The board held that portions of Spreen's invention conflicted with patents already issued to Hugh James Sullivan, Milwaukee; Richard Whitaker, New Brunswick, N. J., and Ralph W. Emerson and Frank Bishop, South Bend, Ind.

ARMSTRONG BOSTON OFFICES ARE CENTRALIZED

LANCASTER, Pa.—All the Boston branch sales offices and warehouses of the Armstrong Cork Co. were consolidated in one office at 286 Congress St., on June 15. Heretofore, separate offices have been maintained for each of the floor, insulation, cork and shoe products divisions of the company.

In addition, the Temlok dealer sales division of the Armstrong Cork & Insulation Co., recently organized for the sale of Armstrong's Temlok Insulation, will be located at the new address.

G. E. METER RECORDS TIME OF OPERATION

SCHNECTADY, N. Y.—The actual total operating time of any electric equipment using alternating current is shown by a time meter introduced by the General Electric Co.

Within the meter there is a synchronous motor which operates while the circuit of the equipment is closed. This motor, through suitable gearing, drives a cyclometer five-digit counter, arranged to read in either hours or minutes.

This meter can be used in checking piece-rate operation, particularly when idle-time credit is allowed in computing wages. A weekly reading of the meter shows how many hours the machine was in operation, and hence, by deduction, the number of idle hours.

Other applications to which the meter has been applied include, checking on the amount of time electric refrigerator mechanisms are in operation, and in making life tests of radio and other vacuum tubes, incandescent lamps, etc.

The meter is supplied on a pedestal for portable use, or with a threaded connection for permanent mounting on conduit. The meters are available for 110, 220 or 440 volts, and for 25, 50 or 60 cycles; but no one device has more than one voltage or frequency rating.

REPRESENTS BUSH IN WEST

HARTFORD, Conn.—V. D. Clothier, 224 E. Eleventh St., Los Angeles, has been appointed representative for the Bush Mfg. Co. in that district.

N. E. L. A. EXHIBITS FEATURE MODELS OF LARGER SIZES

Refrigeration Engineers Present To Explain Technical Details

By John T. Schaefer

ATLANTIC CITY, N. J.—Refrigeration engineers were here last week representing all the manufacturers exhibiting electric refrigerators at the N.E.L.A. convention, to explain the features and merits of the machines displayed in their respective booths.

Several new models were displayed at the convention, chiefly additions to standard lines, in slightly larger storage capacities. Westinghouse showed new 6.5 and 8.5 cu. ft. domestic machines, while Servel displayed its new 7 and 9 cu. ft. hermetic units.

Majestic made first showing of its new 4 cu. ft. apartment house models in two optional heights to suit space requirements.

A new industrial type of water cooler displayed by Westinghouse marked the entrance of that company into the field of commercial refrigeration. Frigidaire's finger-controlled water coolers were publicly shown for the first time, and occasioned considerable interest in that quarter.

Refrigeration equipment was shown in the following exhibits: Apex, Frigidaire, General Electric, Kelvinator, Kulair, Majestic, Servel, and Westinghouse. In almost every instance, a glass-enclosed condensing unit or cut-away compressor had been prepared to show N. E. L. A. delegates exactly how the machine works. Mechanical explanations were the order of the day.

Booth attendants were talking to a critical technical clientele which was interested in current consumption and power factor, as well as mechanical reliability. Some had demonstration boards of parts and materials on which they could point out the constructional refinements which have been made to insure better machine operation.

Condensers and evaporators were mounted on racks so their details could be explained easily, and cut-away sections of cabinets illustrated box assembly and insulation.

Among the other household load-building appliances exhibited at the convention were washing machines, ironers, vacuum cleaners, toasters, waffle irons, ranges, water heaters, fans, coffee percolators, and food mixers.

INCO FEATURES MONEL METAL AT N.E.L.A. CONVENTION

ATLANTIC CITY, N. J.—A General Electric refrigerator and a Frigidaire ice cream cabinet trimmed in Monel metal were shown in the booth of the International Nickel Co., at the N. E. L. A. convention here last week.

Engineers

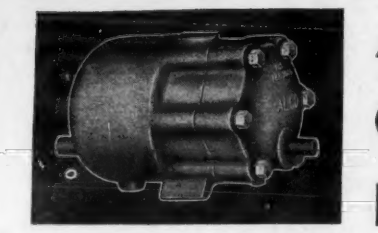
Larry A. Hawkins (left), who guides Floyd Gibbons, radio fast-talker, during his trips through the G. E. House of Magic, with E. L. Manning (center), also of the General Electric research laboratories, and A. W. Berresford (right), managing director of the N. E. M. A.

Salesmen

J. M. Fernald (left), of Kelvinator; R. B. Ambrose (center), of Frigidaire; and W. E. Landmesser (right), General Electric commercial sales executives, forget competitive rivalries while they fraternize at the N. E. L. A. convention in Atlantic City.

300 TON REFRIGERATION PLANT COOLS AIR IN FOX THEATERS

NEW HAVEN, Conn.—(UTPS)—York Ice Machinery Corp. has installed what is described as the largest theater cooling plant in New England, in the Fox-Poli and Bijou theaters here. Two machines, having a total ice-making capacity of 300 tons every 24 hours, pump 115,000 cu. ft. of conditioned air into the two theaters every minute, according to Arthur Benline, chief engineer for Fox New England theaters, who was in charge of the installation.



A Simple, Inexpensive Control Valve for Flooded Systems

Type H—High Pressure Float Valve

Here are six advantages of the Alco float valve:

1. *Small*—The Alco Type H float valve occupies little space—actual dimensions being: length 9⅝ in.—height 6 in.—width 5¾ in.
2. *Inexpensive*—The High Pressure float valve is low in first cost and low in maintenance on account of its extreme simplicity.
3. *Patented feature eliminates gas binding* — The valve contains a vent-tube which prevents non-condensable gases collecting in the valve chamber.
4. *Can be located anywhere*—The use of the vent makes possible the installation of valve at any height with respect to receiver and low side. It need not be placed below receiver.
5. *Eliminates long runs of insulated pipe between valve and low side*—By installing the valve on top of the cooler, or close to it, the length of insulated pipe between the valve and low side is reduced to a minimum.
6. *Valves available for capacity up to 25 tons*—The port opening of the standard High Pressure Float Valve is sufficiently large to satisfactorily handle loads up to 10 tons of refrigeration. For larger loads, up to 25 tons, the port size can be increased at a very slight additional cost.

ALCO VALVE COMPANY, INC.
Factory: 2636 Big Bend Blvd., Maplewood Branch P. O.
ST. LOUIS, U. S. A.

West Coast Representatives:
Pacific Scientific Co.
Los Angeles—San Francisco

Eastern Office:
433 E. Montana Ave.
Philadelphia, Pa.

ALCO

Manufacturers of constant pressure expansion valves, Thermo valves, high pressure float valves, liquid magnetic stop valves, and suction line stop valves.

KELVINATOR EXHIBITS FULL LINE AT N.E.L.A.

ATLANTIC CITY, N. J.—Kelvinator models ranging in food storage capacity from 4 cu. ft. to 22 cu. ft. were all connected and running in the Kelvinator display at the N. E. L. A. convention here last week.

In the center of the exhibit, a glass-enclosed, silver-plated compressor revolved slowly to demonstrate, through its cut-away sections, the operation of the high side of 4.5 and 6 cut. ft. models. Cut-away surfaces were painted red to attract attention to the internal workings of the machine.

Recessed behind the back wall of the exhibit were two large illuminated pictures, one of the Kelvinator plant in Detroit, and the other of the Leonard factory in Grand Rapids, Mich.

The De Luxe line showing included models D-6, D-8, D-11 and D-14, featured by all-porcelain interiors and exteriors, two-tone chromium-plated hardware, and the "Frost Chest" for frozen foods, fowl and game which require freezing temperatures. A temperature of approximately 25° F. is maintained in this tray.

The De Luxe models are further distinguished from the Kelvinator standard line by French gray door trims, hand-rubbed mahogany door sills, and an "Isothermic" tray which is designed to freeze ice cubes in an hour and a half.

A light inside each cabinet in the De Luxe line is controlled by a switch on the exterior nameplate assembly. Next to the switch is a red pilot light which burns with the inner light, to warn the user not to leave it on and waste refrigeration.

Kelvinator types S-4 and S-7, 4 and 7 cu. ft. models of the standard line, were also exhibited. The former is finished inside and out with white porcelain; while the latter has a porcelain interior, gray porcelain body, and white porcelain doors and top.

Showing of the 5 and 7 cu. ft. Yukons, with lacquer exteriors and porcelain interiors, completed the display of domestic models.

Two models CW-30 pressure type water coolers furnished drinking water to booth attendants and visitors. These types are equipped with white porcelain waste receptors, chromium plated splash guards, and hardware of modernistic design. White lacquer finishes were shown, although dark green or mahogany Krinkl finishes are optional.

Green and mahogany finished model BW-20 bottle water coolers were also on display. These coolers include a refrigerated compartment for cooling and storing bottled beverages.

Two types of ice cream cabinets were exhibited at the show; a four-hole combination cabinet, and a three-hole portable model. All ice cream cabinets are furnished with monel metal tops.

Five different sizes of Kelvinator condensing units were shown, counting the model C-10 1/6 hp. silver-plated machine which was turning inside the glass case. They were models F-32, WF-42, R-31, and WR-41. Models F-32 and R-31 are air-cooled units, while WF-42 and WR-41 have condensers cooled by a dual spiral water tube inside the liquid receiver.

All the condensing units except the silver-plated C-10 had two-cylinder compressors.

A representative line of Kelvinator's dry system cross fin cooling units for commercial duty was presented by models XO-60, XO-10, XO-20, XO-40, XO-80, XO-100, XO-130, and XO-140. These were mounted on demonstration racks so their construction could be explained easily to N. E. L. A. delegates.

Men Who Are Putting the 'Electric' in Electric Refrigeration

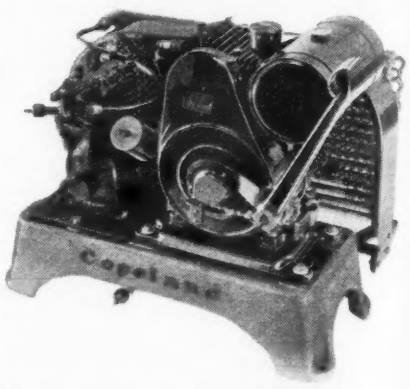
H. B. Keath, B. S. Woodman and H. L. Neagle of Wagner Electric Co. examine the Wagner refrigeration motor on display at the N. E. L. A. convention.

GASOLINE-DRIVEN MACHINE ANNOUNCED BY COPELAND

MT. CLEMENS, Mich.—New gasoline driven Copeland condensing units brought out to meet the demand for mechanical refrigeration where electric power lines are not available are announced by the Copeland Sales Co. of this city.

This new equipment, Copeland officials claim, is adaptable for all cases where refrigeration is required, especially dairy installations.

These new models are QG-252, a 1 hp. unit; RG-516, also 1 hp., and XAG-1200, a 2½ hp. unit. These condensing units have for their motive power a single



Gasoline-Driven Condensing Unit

cylinder, 4-cycle, air-cooled engine in place of the customary electric motor. They are started by means of a foot lever. The temperature control furnished each unit is of the reverse acting type which grounds the ignition circuit when the customary cut-out point has been reached, causing the engine to stop.

APEX EXHIBITS WASHERS, REFRIGERATOR, CLEANERS

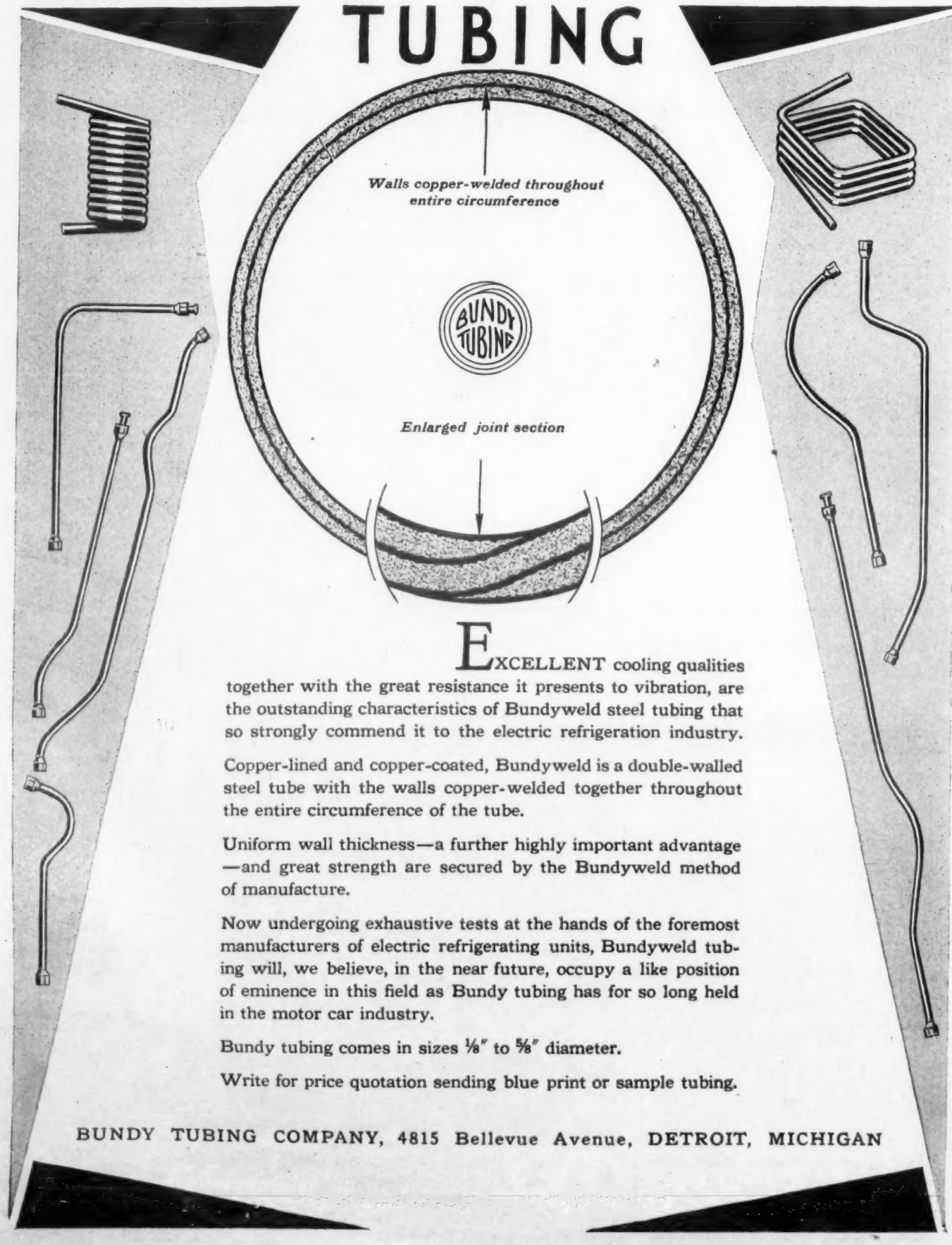
ATLANTIC CITY, N. J.—A full line of household appliances—washers, ironers, vacuum cleaners and an electric refrigerator was shown in the exhibit of the Apex Rotarex Corp., Cleveland, at the N. E. L. A. convention here last week.

The refrigerator occupied the center of the display, with other equipment grouped around it.

Refrigerators were added to the Apex line about four months ago, following the purchase of the refrigeration activity of the Wayne Home Equipment Co., Ft. Wayne, Ind. Many of the dealers of the Apex washers and ironers already have taken on the refrigeration line, according to R. J. Strittmatter, vice president in charge of sales.

The refrigerator on display here had a food storage capacity of 4.5 cu. ft., and was recently priced at $159.50. Five domestic washing machines, one electric ironer, two small apartment house washing machines and two vacuum cleaners were shown in the exhibit.

BUNDYWELD TUBING



EXCELLENT cooling qualities together with the great resistance it presents to vibration, are the outstanding characteristics of Bundyweld steel tubing that so strongly commend it to the electric refrigeration industry.

Copper-lined and copper-coated, Bundyweld is a double-walled steel tube with the walls copper-welded together throughout the entire circumference of the tube.

Uniform wall thickness—a further highly important advantage—and great strength are secured by the Bundyweld method of manufacture.

Now undergoing exhaustive tests at the hands of the foremost manufacturers of electric refrigerating units, Bundyweld tubing will, we believe, in the near future, occupy a like position of eminence in this field as Bundy tubing has for so long held in the motor car industry.

Bundy tubing comes in sizes ⅛" to ⅝" diameter.

Write for price quotation sending blue print or sample tubing.

BUNDY TUBING COMPANY, 4815 Bellevue Avenue, DETROIT, MICHIGAN

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Precision Built
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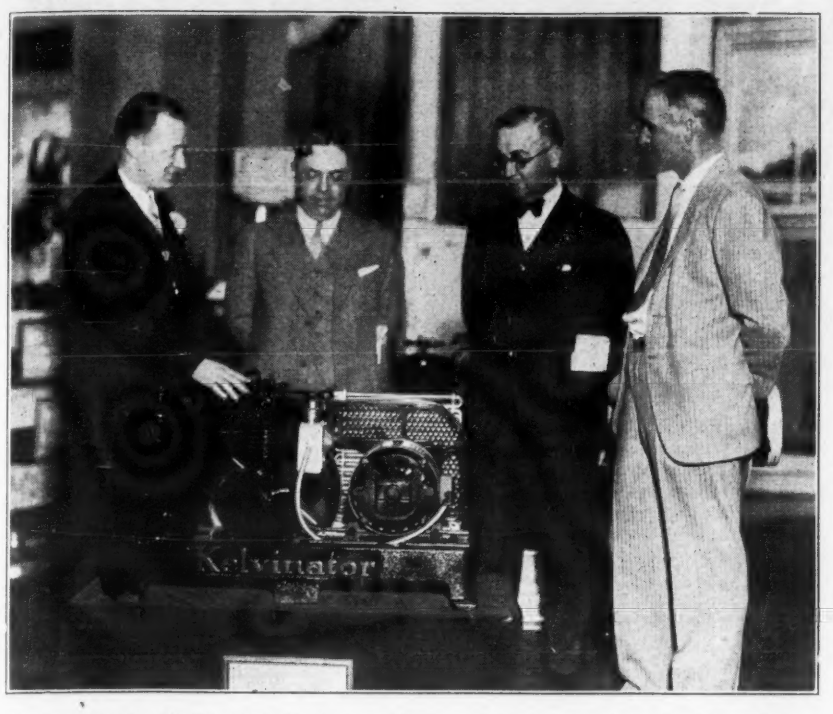

John Wyllie (left), Kelvinator engineer of Detroit, gives the low-down on Model F-32 to a couple of home towners—Roy Duncan and T. L. Hinks of Detroit Edison Co. J. C. Burton, Kelvinator district manager in Philadelphia is at the right.

SERVEL 7, 9 FT. JOBS REVEALED AT N.E.L.A.

ATLANTIC CITY, N. J.—First public showing of 7 and 9 cu. ft. Servel hermetic refrigerators was made here last week in the Servel exhibit of the N. E. L. A. convention. Announcement of these two models brings the Servel hermetic line to a total of five refrigerators, SE-3, SE-4, SE-5, SE-7 and SE-9. All were on display, in addition to two Servel water coolers. The 7 cu. ft. type is priced at $295, while the SE-9 sells at $370, both prices f. o. b. Evansville, Ind.

The two new models each have a compartment inside the evaporator for keeping game and quick-frozen foods at freezing temperatures. The compartment is 10 in. x 9 in. x 4 in. high, and is fabricated from tinned copper.

No fundamental changes were made in the design of the new units; although the compressor has a slightly larger bore and stroke. The reciprocating compressor is hermetically sealed in the "Derby Hat" steel dome, mounted underneath the food storage compartment. A 1-6 hp. capacitor type motor, controlled by thermostat and switch assembly, operates the compressor.

Manual operation of the switch can be accomplished by the temperature control lever located at the front of the evaporator. Overload and under-voltage protection is provided by the switch assembly which opens the circuit under abnormal conditions; operation of the units can be started again by turning the temperature control pointer to "off," and then to "chilling."

Control of the methyl chloride flow to the porcelain on steel evaporator is accomplished by the choke tube which releases the refrigerant in a slow stream.

The new SE-7 and SE-9 manufacture 72 ice cubes and one large cake of ice for special garnishing or ice cream making purposes, the total ice making capacity being approximately 21 lbs. The 7 ft. refrigerator offers 15 sq. ft. of food shelf area, while the 9 ft. box has 19.6 sq. ft. of shelf space.

Overall dimensions of the SE-7 are 62⅞ in. high, 33¼ in. wide, and 26½ in. deep; the SE-9 has the same height and depth, but is 41½ in. wide. All the Servel machines have porcelain interiors, white Pyroxylin exteriors, and chromium plated brass hardware.

During the show, Servel engineers demonstrated the operation of the electrical control and the cutting in and out of the compressor action at different pressures on a test-board at one end of their exhibit. A wattmeter, mounted on the board, indicated the power consumption of the connected condensing unit.

TINCHER OPENS SERVICE SHOP

MOBILE, Ala.—The Tincher Refrigerating Service has opened for business at 709 Springhill Ave. James C. Tincher is manager.

Westinghouse Exhibits New Domestic Units, Water Cooler

ATLANTIC CITY, N. J.—Two new models of domestic refrigerators, rated at 6.5 and 8.5 cu. ft. food storage capacity, and the first Westinghouse pressure type water cooler, were introduced last week in the exhibit of the Westinghouse Electric & Mfg. Co. at the N. E. L. A. convention.

Circled around the Westinghouse refrigeration exhibit was its complete line of hermetically sealed domestic refrigerators, WL-45, DWP-130, DWP-85, DWL-180, DWP-75, DWP-100 and the two new models, WL-65 and WL-85.

The new machines have porcelain interiors and lacquer exteriors, with the broom-high legs and buffet tops which characterize the Westinghouse line. They are 60 in. high and 22½ in. deep. The WL-65 is 31⅞ in. wide, while the WL-85 is 38⅞ in. wide.

They are operated by a ⅛ hp. motor, and use the same direct expansion system used in other Westinghouse models. Ninety-six ice cubes, a total of 10½ lbs. of ice, can be made in the ice cube trays of these new refrigerators.

The new water cooler is an industrial type, and has been labeled model WT-501. It has a 5 gal. per hour capacity to cool water from 80° to 50° F. The high side is a Westinghouse SD-16 hermetically sealed condensing unit, operated by a 1-6 hp. motor running at 1,150 r. p. m.

A feature of the cooler is the utilization of the refrigerating effect of waste water to cool incoming water in a spiral pre-cooler coil over which the cold waste water runs.

The water cooler cabinet is made of 18 gauge steel, finished in black Krinlac. By removing the front panel, the compressor and cooling assembly can be removed for adjustments. On the porcelain enamelled cast iron top is mounted the Ebco lever, bubbler fittings and a glass filling tap.

Tap water is cooled by indirect expansion of the refrigerant. The water coil is made of ½ in. tinned copper tubing.

With the standard 9½ in. legs, the water cooler stands 43½ in. high, and is 25 in. wide and 21 in. deep. Legs 5¾ in. high are also offered, or the legs may be left off entirely.

Metal Stampings
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Louvered Panels — Special Trays or Panels — Water Cooler Panels.
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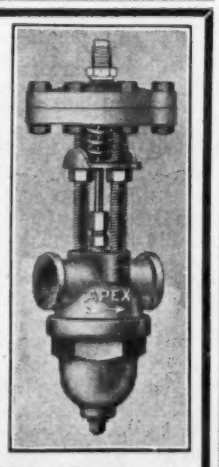
Automatic Refrigeration Specialties
Expansion Valves, Pressure Control Water Regulators, Gas Pressure Regulators, and Water Pressure Regulators.



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TEXAS DEALER DEVELOPS DOMESTIC WATER COOLER

DENTON, Tex. — A pressure type water cooler for installation inside a domestic refrigerator and using a pressure control duplexed with a flooded system float valve, has been developed by A. F. Evers, Jr., of the Evers Hardware Co., local Frigidaire dealer here. One-half gallon of cooled water can be drawn every 10 minute, he claims.

The water cooling unit consists of a galvanized iron tank filled with sweet water and placed between the Frigidaire evaporator and the cabinet wall. In the upper portion of the tank a copper coil is fed sulphur dioxide from the refrigerator liquid line. In the lower part of the tank is another copper coil, one end of which connects to the city water mains, the other end has a small hydrant.

Flow of the refrigerant is controlled by an American Radiator expansion valve in the liquid line; the bulb is placed in the middle of the tank.

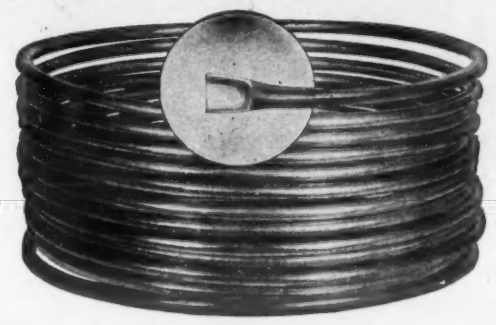
To prevent freezing of the tank, by loss of heat, to the adjacent evaporator, Mr. Evers places a sheet of fibre between them.

McGRAW AWARD CANDIDATES DUE ON JULY 1

NEW YORK CITY — Recommendations of candidates for the James H. McGraw awards for electrical men must be received by July 1 at the Society of Electrical Development here, it has been announced.

Four awards are offered annually, each consisting of a bronze medal and a purse of $100 in gold. They are given to the man responsible for the most outstanding accomplishments of the year in manufacturing, wholesaling, contractor-dealer merchandising, and cooperation.

DEHYDRATED WOLVERINE SEAMLESS COPPER TUBING
Bright Annealed or Tinned — Inside and Outside
Highest quality seamless Copper Tubing—perfectly dehydrated and solder-sealed — made to A. S. T. M. Specifications (B-68-30-T) —ready for quick installation. Send your production requirements for quotations, or write for rush shipment from stock.



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EVERDUR
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THIN-SHEET FORM

COLD-ROLLED SHEET EVERDUR is now available in gauges as thin as .003″... ductile enough to bend through 180° and approximately 130,000 pounds per square inch in tensile strength.

In any form, Everdur Metal, a copper-silicon-manganese alloy, combines the strength of steel with unusual resistance to many corroding agents, especially the commonly used refrigerants.

And it has excellent working properties, either hot or cold . . . can be welded like steel by any method, brazed, silver soldered or soft soldered. Everdur fits smoothly into production operations without requiring special processes.

Exclusively an Anaconda product, Everdur is manufactured by The American Brass Company in the form of sheets, strips, plates, wire, rods, tubes and die-pressed parts. Everdur bolts, nuts, screws, nails, etc., are available from leading manufacturers.

Literature giving detailed information on the properties of Everdur will be furnished on request.

ANACONDA from mine to consumer

Other Anaconda Products used by the Electric Refrigeration Industry include:
Tinned copper for ice trays, grids, containers, and compartment linings for commercial units.
Free-turning Brass Rods.
Brass, Tobin Bronze* and Everdur* die pressed parts and forgings for valves and fittings.
Ambrac*, a corrosion-resistant white metal of high strength and good workability, for screws, bolts, racks and metal trim.
Where strong, non-rusting screws are needed and white metal is not essential, they can be obtained in Everdur* from leading fabricators.
*Trade-marks Reg. U. S. Pat. Off.

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ANACONDA COPPER & BRASS

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An Unspoiled Industry

REFRIGERATION executives are watching with interest the trends in general business that various economic prophets have interpreted as being on the upgrade.

W. L. Cooper, director of the bureau of foreign and domestic commerce claims that recent industrial movements indicate that the first quarter of 1931 marked the turning point in the prolonged business depression that set in 20 months ago, and substantiates his belief with statistics gathered by the department of commerce.

Why has the refrigeration industry been the one notable exception to the long list of major industries languoring in the business doldrums?

For one thing, the stock market holocaust of October, 1929, found the refrigeration industry imbued with a spirit of hard work. Serious problems of engineering and merchandising still faced the industry, and refrigeration men were mighty busy working on them. Business conditions didn't call the refrigeration executive from his golf to a hurried study of the market—for since the beginning of the industry, his job had demanded his full attention.

No Easy Profits

Easy profits were unheard of in the industry; in fact, profits of any kind were rare. It was only by hard work, perseverance, and an abiding faith in the future of electric refrigeration that the existing companies had survived. The industry had never enjoyed a boom in which the chief problem was to build enough machines to fill the demand. Twenty months ago it was in the midst of an energetic program to educate the public to the necessity of electric refrigeration. The stock market occasioned some alarm, but there was nothing to do but keep on the job.

The refrigeration dealer had almost never known a prospect to come in his store and ask to buy a refrigerator; his job has always been to go out, dig up a buyer, and convince him of his need for electric refrigeration.

Likewise, the manufacturer wasn't accustomed to dealers demanding more machines—he was used to prodding the sellers constantly, and helping them to make more sales.

During depression times, incidentally, the dealer has been conscious of the fact that many people are financially unable to buy. But he also knew that a sizable number of prospects did have the cash, so he aggressively went out after that market.

Engineers Keep Pace

The engineer has been busy day and night figuring out ways to effect improvements in the product, for installment buying plans and long-time guarantees demanded that the refrigerator show no weakness during the period of the payments or guarantee.

Throughout the depression, the refrigeration industry has been building machines and selling (both by dint of hard work), improving its products, creating organizations, and playing the happy role of employment stabilizer.

The policy "keep going regardless of the prospects of immediate profits" would have been frowned upon in 1928, but it has a record of results to commend it in depression times.

On Our Bookshelves

"SECONDARY ALUMINUM"

Author: Robert J. Anderson. Publisher: The Sherwood Press, Inc., Cleveland, Ohio. Pages: 563. Price $5. Publication date: 1931.

PRODUCTION practices and economic aspects of the secondary aluminum industry are treated at some length in this first treatise on the utilization of secondary aluminum and scrap aluminum instead of the primary metal.

The author presents a definition of secondary metals as given by Dunlop of the U. S. Bureau of Mines, with the remark that it is a clear and understandable statement:

> *Secondary metals* are those recovered from scrap metal, sweepings, skimmings, and drosses, and are so called to distinguish them from metals derived directly from ores, which are termed *primary metals.* The distinction does not imply that secondary metals are of inferior quality, for metals derived either from ore or from waste material vary in purity and in adaptability to use in making certain products.

From the available data, the author estimates that the annual turnover of secondary and scrap aluminum amounts to about half the world's output of primary aluminum. Or, for every pound of the primary metal produced, he believes that one-half pound of secondary aluminum (plus scrap), is utilized.

Prior to the World War, secondary aluminum and alloys were used but very little by the foundry trades. The shortage of aluminum occasioned by the war turned the foundrymen's attention to the use of secondary metals, and since then the industry has grown to no small proportions.

During the course of the book, the author discusses the kinds and sources of scrap, showing which are the most desirable for remelting; discusses the size and extent of the marketing operations of scrap aluminum, commending the stabilization of prices between sellers, and the fact that the differential between scrap and primary metal costs is now much less than formerly.

Sampling, assaying, and evaluation of the scrap metal, and the prevention of oxidation are explained in the book; and subsequently melting furnaces, and remelting practice and blending.

With the advent of die-casting in 1914, and the permanent-mold process in 1918, many special aluminum alloy compositions were developed; the increasing applications of heat treatment to aluminum has also encouraged the use of a host of different alloys. Since the bulk of secondary-pig metal made from scrap, consisting of light alloys of various compositions, alloys come in for considerable treatment by Mr. Anderson.

A series of production cost studies points to a cost range from 0.31 to 1.01 cents per pound for secondary aluminum, depending upon various production circumstances. Actually the cost runs to about two cents, he said, and with 100 per cent burden, the gross cost is usually about three cents a pound. A spread of four cents per pound between the cost of scrap on a recovery basis, plus the net operating expenses and the selling price of pig metal, is an ample margin to cover general operating and overhead expenses plus profit, he states.

Although consumers have generally felt that secondary aluminum was in some way inferior to the metal from primary producers, the author claims that it can and is being used satisfactorily every place the new metal finds use. This pre-supposes, he admits, proper remelting and refining to insure its required composition.

GLEANINGS
FROM RECENT PERIODICALS

NINETEEN-THIRTY would have been called a perfectly normal year in the electrical manufacturing industry had it fallen between, rather than after, 1928 and 1929. Figures of a representative group which have already reported for 1930 show 1930 almost exactly midway between 1928 and 1929 totals. They are 12½ per cent behind 1929 and about 12½ per cent over 1928.

All this is not in any way intended to give the impression that the year was a good one. It does illustrate, however, the narrow margin between a good year and a poor year.

The current year is also a difficult one. While there are many electrification projects and power plant construction plans under way, the volume of actual orders is disappointing. The General Electric Company, for example, entered 1931 with a backlog of unfilled orders totaling $56,062,000, the smallest total in five or six years, against $94,623,000 in 1929.

In the case of Westinghouse the situation is similar. President F. A. Merrick is stated to have said that the company operated at a deficit during January and February. He is alleged to have added, however, that orders were increasing and that the outlook was some better.

What do electrical manufacturers see in the balance of 1931? While few are to venture predictions, it is generally agreed that any material evidence of general business recovery will release accumulated orders in a large way in this industry. The central-station program is a large one and service standards must be maintained. Railroad electrification has been definitely committed to as a policy, and in the appliance field aggressive merchandising plans have been made.

In the export field there has been a sharp falling off in sales this year to date and in the closing months of 1930. There is evidence that the business pick-up abroad will be rather less rapid than that at home. Export totals, however, are less than 10 per cent of domestic figures.—*Electrical World,* April 18, 1931.

Millionth G. E. Unit On Display

ATLANTIC CITY, N. J.—General Electric's millionth refrigerator was on display here last week in the G. E. refrigeration exhibit at the N. E. L. A. convention. The gold-plated unit revolved slowly on a pedestal in front of a screen on which colored lights played continually.

With fitting ceremonies over the coast-to-coast hook-up of the National Broadcasting System this Saturday, Gerard Swope, president of the General Electric Co., will present the refrigerator to Henry Ford as the personalization of mass production. The refrigerator will be placed in Ford's Edison Institute.

Arranged around the semi-circular G. E. refrigeration exhibit were some 20 models, representing the complete domestic line, and many of the commercial refrigerators and water coolers. Monitor Tops were placed in several small alcoves recessed behind the exhibit, and dramatized by the lighted purple or metal backgrounds.

Workings of the hermetically sealed compressor were shown by a glass-enclosed demonstrator mounted on an angle iron frame, with the cooling unit suspended in its proper place.

One of the water coolers was controlled by a photo-electric cell which electrically opened the water valve when the person approaching to drink interrupted a ray of light falling on the cell.

In a nearby General Electric exhibit of portable farm motors and electric farm equipment, a milk cooler was also displayed.

Many convention delegates were amazed by General Electric's "Adventures in Science," a secluded chamber where various tricks of the thyratrons, high frequency coils, photo-electric cells, and other vacuum tubes were demonstrated.

Any person who attempted to rob the "First National Bank," where several coins lay in an ash-tray would disturb the balance of the capacity-controlled thyratron circuit, ringing a loud bell.

Another machine (using the photo-electric cell principle), separated the black from the white balls which the delegates fed to it, with an error.

Visitors were defied to light the candle mounted in front of a hole in another mysterious box, for a match held to the wick would energize a photo-electric cell which started a fan blast of air and blew out the match. S. R. Cooper of Servel says he was fast enough once to get it lit for an instant, but there have been no witnesses to substantiate his claim.

GRIGSBY-GRUNOW EXHIBITS APARTMENT HOUSE MODEL

ATLANTIC CITY, N. J.—Public showing of the 4 cu. ft. Majestic refrigerator marked the exhibit of Grigsby-Grunow Co., Chicago, at the N. E. L. A. convention here last week. This year's exhibit was the first ever held by this company at an N. E. L. A. meeting.

In the foreground of the exhibit, an illuminated cut-away model of the refrigerator cabinet had been prepared to show the insulation, air ducts, cooling and lubrication of the motor, and operation of the compressor—over which a glass dome had been erected.

Engineers were on hand to explain details such as the exterior finish which is first given the Oakite process, then Bonderizing, a prime coat, and finally four coats of white Pyroxalin lacquer. The interior finish is porcelain enamel.

The reset button, overload trip and temperature control are all combined in one assembly operative from the front of the cabinet.

The new 4 ft. apartment house model is made in two sizes to facilitate installation in small quarters. The "regular" 4 ft. size is 56 in. high, 25⅝ in. deep, and 24 7-16 in. wide. By using a flat top instead of the beveled top, and 2 11-16 in. legs instead of 8⅞ in. legs, the height is reduced to 48 in. for the "special" apartment house size.

Three inches of Dry-Zero insulation are used in the 5 and 7 ft. cabinets, with three and one-half inches in the doors. The smaller model has two inches in the walls, and two and one-half inches in the door. All models use the same size condensing unit, with a 1-6 hp. motor. The 5 and 7 ft. models will freeze 84 ice cubes, while the 4 ft. unit will make 42 ice cubes.

The new apartment house refrigerators are priced at $169.50 f. o. b. Chicago, while the 5 and 7 cu. ft. models are marked $235 and $260 respectively, f. o. b. Chicago.

SEAL REFRIGERATION PARTS

IT IS of the utmost importance that all parts of the refrigerating system that are exposed to the refrigerant be kept sealed from air and moisture. Such parts as compressors, tubing, refrigerant oil, expansion valves, etc., should always be kept sealed when they are stored in the stock room. If parts are left exposed for any length of time they should always be thoroughly baked before using. *Kelvinator Service News.*

FRIGIDAIRE SHOWS NEW WATER COOLER

ATLANTIC CITY, N. J.—Chief interest among visitors to the Frigidaire exhibit at the N. E. L. A. convention here last week was in the new modernistic design water coolers which were announced two weeks ago in the NEWS. The cooler cabinets are finished in a dark bronze color which the Frigidaire men have not yet named. The cooled water is controlled by a button-operated valve under the spout, so that the drinker can draw a cup of water with the same hand that holds the cup.

The center of the exhibit was a water fountain of a lady bearing a plaque with the theme "Invest in an Electric Refrigerator." Along the walls and sides of the display was a representative line of Frigidaire porcelain-on-steel domestic models ranging in size from the 3 cu. ft. W-3 to the 18 cu. ft. food capacity W-18.

A Frigidaire room cooler near the aisle attracted considerable attention from N. E. L. A. delegates. This machine lowers the air temperature, decreases the relative humidity and circulates cooled air in the room in which it is installed.

A specially-designed fan draws warm air in at the bottom of the cabinet, forces it over the cooling coil, and into the room at the rate of 450 cu. ft. of air per minute. In contacting the cooling coil, the air looses both heat and moisture so that its effective temperature is lowered.

When more than one room, or a very large room, is to be cooled by these units, they can be connected in multiple, R. B. Ambrose of the commercial department points out. Each cooler requires a liquid and suction line connection to a condensing unit, which can be installed in some nearby place.

The room cooler cabinet is 45⅝ in. high, 22⅜ in. wide, 21⅜ in. deep, and is finished in ungrained mahogany. Its shipping weight is 293 lbs.

Also on display was Frigidaire's dehumidifier, designed for use in keeping down air humidities in storage rooms for musical instruments, fine furniture, old documents and in certain manufacturing processes where high moistures are harmful.

The dehumidifier removes from a quart to a quart and a half of moisture per hour from the air, depending upon the climate. Air temperatures are affected very little by the machine, dehumidification being accomplished by condensing moisture on the special cooling coils refrigerated by a ¼ hp. compressor.

Mechanical details of Frigidaire's two-cylinder compressors, were shown in a cut-away model demonstrating its operation. Recent changes in the compressor include a reduced friction stuffing box, and the redesign of the piston valve assembly so that it is only necessary to remove the head in order to reach the valve for adjustments.

Construction features of the Frigidaire machine were illustrated by various parts mounted on a demonstration board, so they could be removed for explanation. The new light-weight kit of parts for salesmen's use in showing 16 features of construction was also displayed.

Mounted on a rack in the left booth were 10 types of domestic cooling coils and three ice-making coils; while in right-hand booth was a two-hole ice cream cabinet and commercial "superduty" coils for showing the application of silver solder and other constructional features.

TELEGRAPHIC CODE TO REDUCE COMMUNICATION COSTS

NEW YORK CITY—A broadside entitled "Realizing an Idea for the Electrical Industry," just issued by a joint committee of the electrical industry, shows how economies of 40 to 70 per cent can be effected in the cost of telegraphic communication by the use of LCODE, which is now being prepared.

The pamphlet carries one page of specimen telegrams to prove its case. A wholesaler message of 94 words from Tacoma, Wash., to Newark, N. J., sent straight would cost $8.34, as against 25 words for $2.48 when sent in LCODE.

The joint committee on telegraph code, representative of the Electragists, N. E. L. A., N. E. M. A., National Wholesalers, Radio Manufacturers and Wholesalers, and the Society for Electrical Development, has been working on LCODE for nearly a year through a sub-committee.

NICKERSON JOINS RESEARCH STAFF OF GAIR CO.

NEW YORK CITY—Arno W. Nickerson, who has been active in process development in the paper industry for a period of years, has joined the research engineering department of the Robert Gair Co.

Since 1917, Mr. Nickerson has been associated with Process Engineers, Inc., of 501 Fifth Ave., more recently as treasurer and director.

He has served as consultant on paper to chemical companies supplying the paper industry and has specialized in development work in connection with paper manufacture.

NEW YORK COMPANY SERVICES DAIRY JOBS

NEW YORK CITY—Operating 24 hours a day, the Independent Electric Refrigerating Service Co., 120 W. 18th St. here, is engaged in the servicing and maintenance of electric refrigeration equipment for a number of ice cream companies, according to officials of the service concern.

In order to facilitate the handling of service calls the company has representatives located in different sections of the city. These men, officials of the company state, are equipped to handle service on all makes of refrigerating machines.

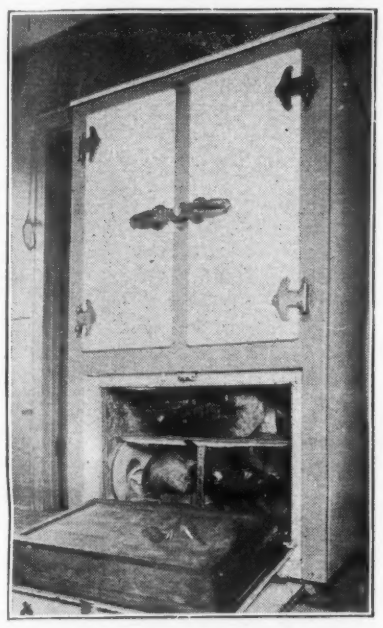
"Many of the smaller metropolitan ice cream companies," officials of the service firm declare, "hesitate to purchase electrical equipment on account of the maintenance cost. Service men, car expense, stock, and continuous service, are some of the problems which add to the unit cost of the equipment."

In addition to servicing equipment, the company has a department for handling all types of installation jobs.

SPECIAL FRIGIDAIRE KEEPS GAME, STEAKS NEAR ZERO

LOS ANGELES—Being an ardent hunter as well as Frigidaire salesmanager for the Los Angeles district, T. J. McIntyre has combined these two pursuits in his own Frigidaire, designing a special freezer compartment for game.

Returning from one of his successful hunting or fishing trips, Mr. McIntyre,



thanks to the low temperature compartment he has built, is not forced to give away his game in a few days, but can preserve it for long periods of time at zero temperatures. The box, Mr. McIntyre says, has paid for itself several times over, not only in the storage of game, but also by preserving steaks and other perishable products purchased at store "specials" at the usual quantity purchase savings.

SERVICE HINTS

By FRANK W. GRAY

IT IS possible to convert sulphur dioxide systems to the use of methyl chloride, or methyl chloride systems to the use of sulphur dioxide, when various minor changes are made to insure correct operation of the converted system.

If a flooded system is to be converted, the boiler head should be removed and a new boiler head with float ball assembly installed for either sulphur dioxide or methyl chloride, as the case may be. The reason for this change is that float balls of different weight are used for methyl chloride than those used for sulphur dioxide.

Next, the oil must be pumped out of the system and removed from the compressor, a heavier oil being used for methyl chloride than for sulphur dioxide.

Lastly, the motor pulleys should be changed, since a methyl chloride compressor of the same piston displacement and condensing capacity as a sulphur dioxide unit should be operated at one-fourth less R. P. M. than the sulphur dioxide machine.

Thus, if a one hp. sulphur dioxide compressor were to be used with methyl chloride, and if this compressor were operating at 400 R. P. M., the motor pulleys should be reduced in size to operate the compressor at only 300 R. P. M. with methyl chloride.

The reason for this change is that methyl chloride machines operate at a higher back pressure than sulphur dioxide, and if the same speed were maintained on a converted unit the condenser would be found inadequate. These changes, naturally, would be reversed when methyl chloride systems are converted to sulphur dioxide use.

Care must be taken to avoid dehydration when designing equipment for the refrigeration of flowers. If a low coil temperature is used in floral boxes, the rapidly circulating air deposits the majority of its moisture content on the cooling coils in the form of frost, drying out the flowers to a point where they discolor and wither.

Flowers will keep best in a relatively damp atmosphere, not lower than 50° F. in temperature. If lower temperatures are used, the flowers will soon droop when exposed to heat. Coils of large surface area, operated on a defrosting cycle at a relatively high coil temperature will produce the best results.

A job was recently inspected where a six-cylinder compressor was found to be equipped with only two narrow belts. This machine was driven by a three hp. electric motor, and when it started up the power load was such as to jerk the belts around the flywheel at least one revolution before they got traction.

Needless to say, the owners of such machines will have to constantly renew belts, and will probably experience many an inconvenient breakdown from this cause.

A safe rule to follow in designing compressors is to provide one of the conventional-type V belts for each cylinder. In other words, a two-cylinder compressor should have two belts, and a six-cylinder unit should have six belts. Of course, larger belts could be used, reducing the number required.

It sometimes becomes necessary to manufacture cross-fin coils for special jobs in the service shop. Any good metal worker can make up the required parts for a cross-fin coil—the trick seems to be to get the parts together satisfactorily.

The copper tubes which contain the refrigerant must be run through holes in the fins, after which some method must be used to expand the tubing to hold the cross-fins in a rigid position. Various methods are used to do this.

One interesting experiment which actually produced results in properly expanding the tubing was the firing of a rifled bullet through from one end to the other. A less radical (and one would presume, less risky) way of doing it is to expand the tubes by hydraulic pressure, oil being used as the medium.

One manufacturer of cross-fin coils uses a rapidly revolving mandril of slightly larger diameter than the tubing to expand it to a snug fit.

When the service man solders up a leaking piece of copper tubing, condenser tube, or other part of the system exposed to high-side pressure, if the hole be larger than a mere pin point, it is wise to plug the aperture with a piece of brass or copper before attempting to solder same.

The reason for this is that solder alone will not always permanently seal a larger sized hole against gas pressure. It is also well for the service man to be certain that no charge of refrigerant remains in the part to be soldered. At least one instance is on record where a rather violent explosion resulted from a workman applying a blow torch to a condenser without releasing the charge.

When air-cooled compressors are placed in dusty basements, or in the kitchens of cafes and restaurants where the air is apt to be saturated with grease, the suction draft of the motor fan is apt to deposit a residue of dust and impurities on the condenser fins which may become so heavy as to seriously impair the condensing capacity of the machine.

When machines long in use have been inspected it has been found in certain cases that the condenser fins were practically closed by dust. There is no apparent remedy for this in the design of the machines, since an unobstructed air draft is necessary to the correct functioning of an air cooled machine.

The service men should, however, look for this condition when inspecting compressors in such locations, and should thoroughly brush out the condenser fins, or advise the owner of the machine to do so at frequent intervals when the dust conditions are particularly bad.

The writer happened to be in a service shop recently when a service call came in from a domestic job located in a suburban district. It was Saturday afternoon, and the service man on duty was not in an industrious frame of mind. So he carefully instructed the distracted lady on the other end of the wire to tap the head of the freezing coil with a hammer, thinking that by doing so a stuck needle valve would release to correct a frost-back.

The lady evidently followed instructions with a vengeance, for a hurry call soon came in from the same job to bring a gas mask and hustle.

The intentions of the service man may have been perfectly legitimate, but aside from the fallacy of instructing a feminine customer to use a hammer on electric refrigeration equipment, the technical man's memory seemed to have failed him—for the job was an expansion valve hook-up, and not a flooded coil system.

MAJESTIC SERVICE SCHOOLS HELD IN TOLEDO

TOLEDO, Ohio—Majestic sales and service schools have been held recently for dealers of the Roberts-Toledo Co., Majestic distributor here. A total of 128 men attended the first two schools, which were held on May 20 and May 28. The third school, held on June 4, also drew a good attendance, according to Stanley Roberts of the distributing organization.

MINNEAPOLIS MERGER INCREASES BRANCHES

MINNEAPOLIS, Minn.—Merger of the Minneapolis-Honeywell Regulator Co. of this city and the Time-O-Stat Controls Co. of Elkhart, Ind., which was announced some time ago in the NEWS, has resulted in increased branch office facilities for serving the trade, according to R. V. Inda of the Minneapolis office.

Headquarters of the company are maintained at 2807 Fourth Ave., South, Minneapolis, with the Time-O-Stat Controls Division remaining at Elkhart. The Minneapolis-Honeywell Regulator Co., Ltd., with offices at Toronto and Montreal, is handling distribution in Canada.

Branch offices are maintained at Boston, Chicago, Cleveland, Detroit, Hartford, Indianapolis, Milwaukee, New York, Philadelphia, Providence, Rochester, San Francisco, St. Louis and Syracuse.

As a result of the merger, Mr. Inda states, duplications in the two lines have been eliminated, and certain production costs reduced.

The Minneapolis-Honeywell line now comprises the Time-O-Stat gas, hot water heater control, mercury tube switch devices, refrigeration controls and electric sign flashers, in addition to its former line of damper regulators and controls for oil or gas burners, unit heater and sectional controls, stoker controls, individual radiator controls and motorized valves, and controls for industrial processes.

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for
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Only 3½" high when full open
Chrome Nickel Steel stem, Chrome plated
Outside type packing nut
Bushing threaded and soldered into body
Stem bevelled for metal to metal back seat in full open position
Unrestricted clear openings equal to copper tubing
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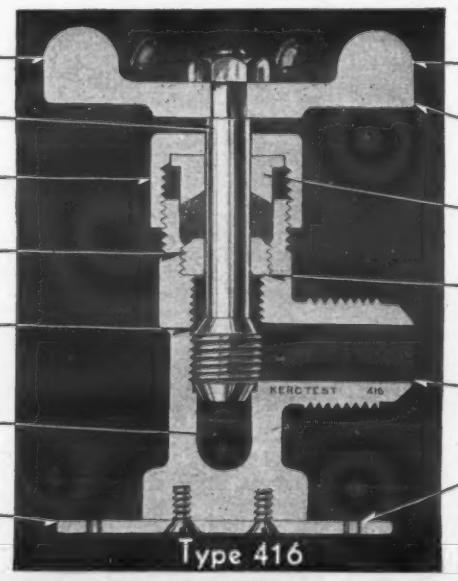

Type 416

Wheel is removable for convenience when repacking
Large handwheel specially knobbed for firm hand grip
Packing follower makes great compression on packing
"Pressure tested" metal to metal back seat when stem in full open position
Maximum size ½" S. A. E. on all 3 openings
Holes in mounting flange accessible for attachment in shallow knockout boxes

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Greensboro - - - - - - - - North Carolina
Home Appliance Service Co.
Cincinnati, Ohio - - - - - - Burbank Street
The Merkel Bros. Co.
Detroit, Mich., 6-247 General Motors Bldg.
W. H. Mark Hanna
Chicago, Illinois, 2317 W. Marquette Road
G. C. Taylor
St. Louis, Missouri, 2817 Laclede Avenue
Brass & Copper Sales Co.
Los Angeles, California, 224 East 11th Street
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From the standpoint of labor-saving, customer satisfaction, plus ease of assembly, there can be no argument against fittings which fit without trouble.

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For years, ever since automatic refrigeration was introduced, this make of fitting has filled every need of the industry.

Forged brass nuts do not distort under any wrench pressure.

Threads are cut to S. A. E. No. 2 (medium fit) standards.

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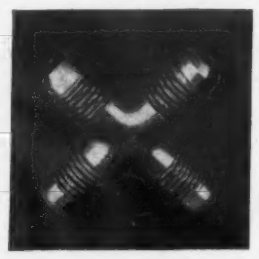

Each seat on Commonwealth fittings is protected in shipping.

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COMMONWEALTH BRASS CORPORATION
COMMONWEALTH AT G. T. R. R.
D E T R O I T

True in 1896-- true today

In the January 14, 1899 issue of the Western Electrician is a description of Wagner's single-phase brush-lifting repulsion-induction motors placed on the market in 1896. Referring to the brush-lifting feature is this interesting statement:

"The wear upon the commutators of these motors is practically negligible, and one of the most satisfactory features in connection with the operation of the motors has been the small amount of attention which they have required."

What was true in 1896 is true today: long commutator life is a requisite for satisfactory motor performance. Wagner's development of a simple brush-lifting mechanism assured long commutator life, and in addition long brush life and freedom from objectional brush noise. » » » For long brush and commutator life, and quiet operation, specify Wagner brush-lifting repulsion-induction motors.

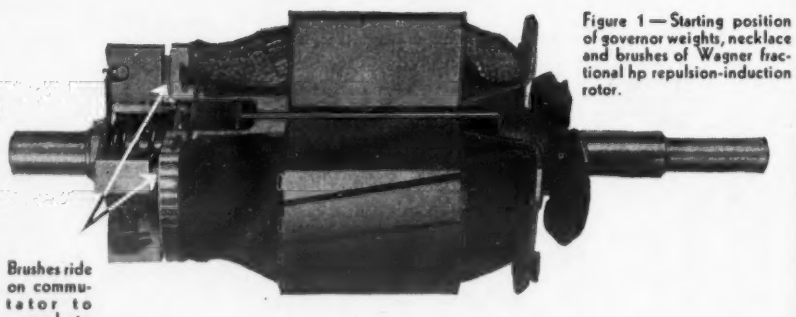
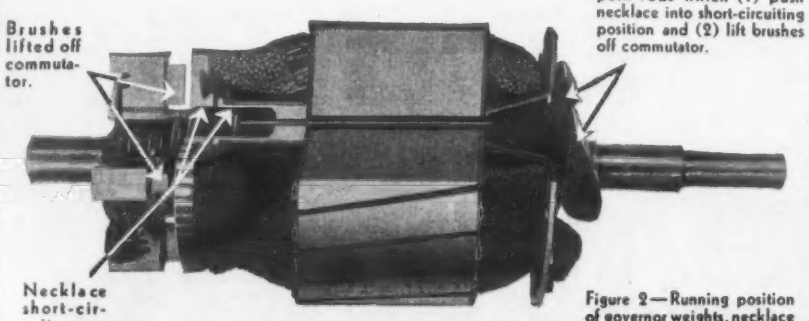


Figure 1—Starting position of governor weights, necklace and brushes of Wagner fractional hp repulsion-induction rotor.

Brushes ride on commutator to complete selected rotor circuit.

Brushes lifted off commutator.

Governor weights, operated by centrifugal force, actuate push rods which (1) push necklace into short-circuiting position and (2) lift brushes off commutator.



Necklace short-circuits commutator bars.

Figure 2—Running position of governor weights, necklace and brushes of Wagner fractional hp repulsion-induction rotor.

Wagner Electric Corporation
6400 Plymouth Ave., St. Louis, U. S. A.
Motors Transformers Fans
Lockheed Hydraulic Brakes

S431-4YA

LATEST PATENTS ISSUED

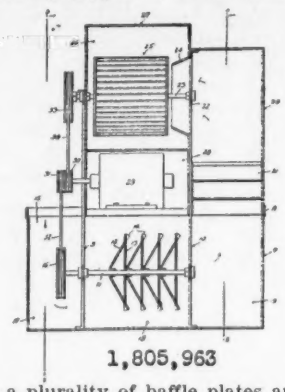
ISSUED MAY 19

(Continued from Last Issue)

1,805,932. SYSTEM OF ICE-MANUFACTURE AND REFRIGERATION. George L. Vail, Denver, Colo. Filed July 12, 1927. Serial No. 205,254. 6 Claims. (Cl. 62—159.)

1,805,963. AIR COOLING AND CONDITIONING APPARATUS. William S. Toncray, Phoenix, Ariz. Filed May 7, 1930. Serial No. 450,548. 3 Claims. (Cl. 261—92.)

1. In an apparatus of the class desribed, an open top water tank, a horizontal shaft mounted for rotation therein, a pulley on said shaft, a plurality of bladed agitating elements assembled on said shaft, a separating casing supported on the tank and including a plurality of baffle plates arranged in the path of movement of the moistened air, said casing provided with an air outlet, a fan housing communicating with said outlet, a shaft mounted for rotation in said housing, a fan carried by said shaft, a pulley on said shaft, an electric motor arranged in said housing, and provided with pulleys, and belts trained over the respective pulleys for simultaneously actuating the shaft, agitators and fans, said fan housing being provided with a final air outlet for discharging the conditioned air into the room.



1,805,963

1,806,012. METHOD OF STERILIZING FRUIT IN REFRIGERATOR CARS. Lester W. Collins, Modesto, Calif., assignor to Ansul Chemical Co. of California, Modesto, Calif., a Corporation. Filed Sept. 21, 1929. Serial No. 394,297. 5 Claims. (Cl. 99—9.)

5. A method of sterilizing produce in a refrigerator car having air currents induced by the refrigerating means and flowing longitudinally of the car, consisting in discharging an undiluted sterilizing gas into the car in a space at the central portion thereof between piles of containers of produce and in an upward direction, and under pressure so that when discharged the gas will strike the ceiling of the car and spread out horizontally essentially through the movements of the air currents.

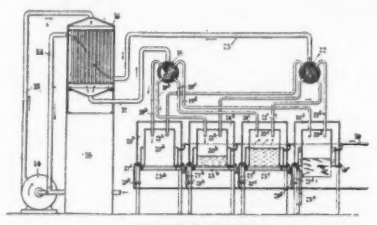
1,806,019. REFRIGERATING MECHANISM. Glenn Muffly, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Dec. 10, 1929. Serial No. 413,102. 1 Claim. (Cl. 62—95.)

In a mechanical refrigerating system, in combination, a cabinet provided with a cooling compartment and a unit compartment separated by a wall, an evaporator in said cooling compartment, a compressing and a condensing unit in said unit compartment, a motor for driving said compressor, a pair of tubes, one positioned within the other for at least part of its length, extending from said evaporator through said wall and forming intake and discharge passages for said evaporator, the outer of said tubes being connected to said compressor unit and the inner of said tubes comprising a capillary tube connected to said condensing unit and forming the sole metering means for controlling the flow of liquid refrigerant to said evaporator, and means controlled by variation in pressure within the outer of said tubes for controlling the operation of said motor.

1,806,021. HUMIDIFIER. Karl D. Perkins, New York, N. Y., assignor to Audiffren Refrigerating Machine Co., New York, N. Y., a Corporation of New Jersey. Filed Dec. 2, 1927. Serial No. 237,242. 4 Claims. (Cl. 183—22.)

1. In air conditioning apparatus, the combination of a chamber, said chamber providing a liquid-containing tank, a constant level liquid supply device, a rotatable shaft extending above the surface of the liquid, a plurality of spaced discs arranged on the shaft and partially immersed in the liquid, means for rotating the shaft and discs, means for producing a current of air through the chamber substantially parallel to the shaft, and a device for removing the excess liquid contained in the air.

1,806,240. PRODUCTION OF CARBON DIOXIDE ICE. James Richardson Donald, Montreal, Quebec, Can. Filed Nov. 1, 1928. Serial No. 316,518. 2 Claims. (Cl. 62—121.)



1,806,240

1. A process of producing solid carbon dioxide which comprises compressing and cooling the gas to liquefy it, conveying the liquefied gas to a closed, heat-insulated chamber, simultaneously evaporating the liquefied gas in another previously filled heat-insulated chamber and employing the resulting gas to effect the first mentioned cooling, and simultaneously removing from another heat-insulated chamber a block of solidified carbon dioxide.

1,806,498. REFRIGERATING MEANS AND METHOD. Bo Folke Randel, San Diego, Calif., assignor to Electrolux Servel Corp., New York, N. Y., a Corporation of Delaware. Filed May 11, 1927. Serial No. 190,604. 15 Claims. (Cl. 62—119.5.)

5. The herein described method of refrigeration, consisting in producing a final high pressure in gas by progressive steps of removing gases from a mixture by condensing, thus accumulating all the partial pressures in the remaining gas.

1,806,559. REFRIGERATING SYSTEM. Franklin B. Hunt, Chicago, Ill., assignor to The Liquid Carbonic Corp., Chicago, Ill., a Corporation of Delaware. Filed Aug. 15, 1930. Serial No. 475,416. 3 Claims. (Cl. 62—115.)

1. A refrigerating system comprising two boilers of the constant liquid-level type, a compressor, connections between the vapor spaces of said boilers and the suction side of the compressor, one of said connections comprising a control valve limiting the suction effect of the compressor on the associated boiler, a refrigerant supply pipe between said boiler and the condenser, means controlled by liquid-level in each boiler for controlling refrigerant flow into said boiler, an expansion valve in each supply pipe, four relatively isolated refrigerating chambers in two of which the boilers are mounted and two of which are respectively traversed by portions of the two supply pipes between their respective expansion valves and boilers, and means dependent upon pressure in boiler space for starting and stopping the compressor.

ISSUED MAY 26

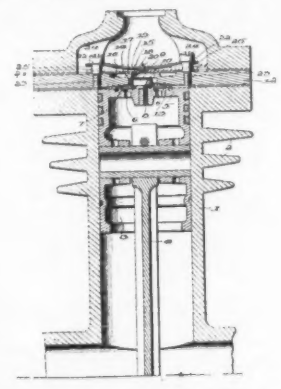
1,806,653. POWER TRANSMITTING DEVICE. Otto M. Summers, Dayton, Ohio, assignor to Frigidaire Corp., Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,301. 3 Claims. (Cl. 74—26.)

1. In a frictional power transmitter a driving member and a driven member having their shafts extending in the same longitudinal direction, one of said members comprising a pulley having cheeks bearing oppositely facing frictional surfaces, a shaft for said pulley, one of said cheeks being axially displaceable with respect to the other, the other of said members including a friction annulus encircling said pulley and attached to the driven member in power transmitting relation, external threads on the pulley shaft, an internally threaded sleeve engaging with said threads and carrying said axially displaceable cheek, said threads being arranged to advance said cheek into clamping frictional power transmitting engagement with said annulus, and a spring attached to said cheek and said shaft to urge the displacement of said cheek through agency of said threads.

1,806,690. PROCESS FOR THE REGENERATION OF ACTIVE SILICA GEL. Gerhard Kroner, Cologne-on-the-Rhine, and Friedrich Wilhelm Stauf, Cologne-Deutz, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 6, 1928. Serial No. 290,880, and in Germany, July 25, 1927. 3 Claims. (Cl. 23—182.)

2. In the process for the regeneration of active silica gel which is impregnated with decomposed organic substances, the step which comprises treating the silica gel with an oxidizing agent in a liquid phase at a temperature between about 90° and 150° C.

1,807,029. VALVE MECHANISM FOR COMPRESSORS. Elmer D. Dunning, Stonehurst, Upper Darby, Pa., assignor to Kulair Corp., Philadelphia, Pa., a Corporation of Delaware. Filed June 19, 1928. Serial No. 286,691. 6 Claims. (Cl. 251—119.)



1,807,029

1. In a valve, the combination with a member provided with a port, of a metallic plate-like valve member for controlling said port, a metallic spring for normally holding said valve member in closed position, a point contact between the intermediate portion of said spring and valve member and means passing through the superimposed ends of the valve member and spring for anchoring said parts in operative relation in such a manner as to permit a limited reciprocation of the valve member and the flexing of the spring without increasing the bearing contact between the spring and valve.

1,807,152. REFRIGERATING UNIT. Carr D. Condon, Des Moines, Iowa. Filed July 2, 1928. Serial No. 289,850. 2 Claims. (Cl. 62—69.)

1. A refrigerating unit comprising a double-walled container, whereby a packet space is provided substantially surrounding an inner compartment, a filling opening for said jacket space, means for tightly closing said filling opening and the jacket space, and a lid for tightly closing the interior compartment, which compartment is capable of being entirely closed to atmospheric air, the jacket space containing a freezing solution and the interior compartment containing a mixture of cracked ice and salt, said unit being entirely self-contained so that it is capable of being transported from place to place and of being readily removed and replaced relative to a refrigerator.

1,807,200. EXPANSION VALVE. French E. Dennison and Ward S. Ireland, Beloit, Wis., assignors to National Refrigeration Corp., Beloit, Wis., a Corporation of Delaware. Original application filed Jan. 29, 1926. Serial No. 84,573. Divided and this application filed June 18, 1928. Serial No. 286,102. 6 Claims. (Cl. 50—23.)

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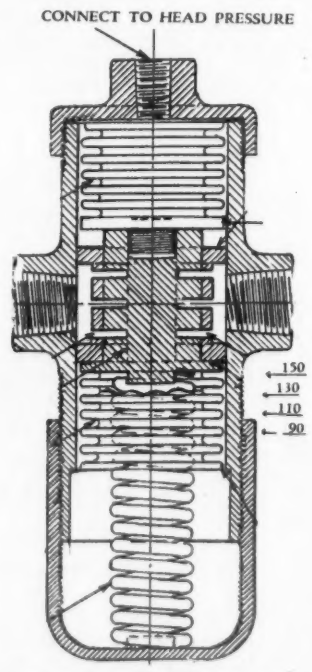
Amreco Pressure Control Valve



SLIDE ACTION VALVE

It prevents the blowing of fuses from overloaded systems at starting.

It prevents breaking down of base and system oil and carbonizing of system.

It prevents ruptures of lines, blown gaskets, distorted valves in compressing part of system.

It prevents burning-out of motors from excessive load to be pulled.

It prevents the scoring of bearings and seized parts caused by broken down oil or excessive heat.

It permits the use of smaller drive equipment due to the elimination of all chance of overload.

It insures full automatic operation under any and all conditions with the positive assurance of safety without interruption of refrigeration.

It requires no attention, works automatically and controls perfectly as set.

It is adaptable to any refrigerant and may be set for any desired pressure.

It may be installed in a few minutes by any service man.

American Refrigerator Car Company
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Miami, Florida

Patented April 8, 1931

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HARTFORD, CONN.
W. H. MARK HANNA
6-247 GENERAL MOTORS BLDG., DETROIT, MICH.

IN MECHANICAL REFRIGERATION

(*Concluded from Opposite Page*)

1,807,332. ARTIFICIALLY COOLED DISPLAY CASE. William Abrahamson, Chicago, Ill. Filed Nov. 16, 1929. Serial No. 407,642. 1 Claim. (Cl. 312—116.)

1,807,354. REFRIGERATING MECHANISM. Charles C. Thomas, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Jan. 18, 1928. Serial No. 247,683. 18 Claims. (Cl. 62—5.)

1. In a refrigerating system of the class described, a refrigerant transformer, a condenser and an evaporator connected therewith, heat supplying means for said transformer, and means for rendering said heat supplying means inactive actuated by a predetermined drop in pressure in said system from a maximum cycle pressure therein.

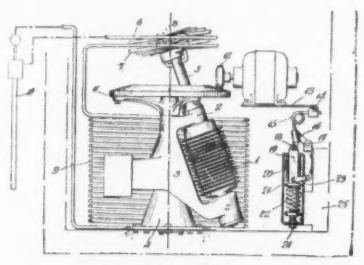
ISSUED JUNE 2

1,807,580. COOLING AND CONDITIONING MACHINE. Thomas Allsop, Philadelphia, Pa., assignor to The Philadelphia Drying Machinery Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 24, 1929. Serial No. 334,843. 9 Claims. (Cl. 26—46.)

1,807,587. SHARP FREEZING CONTAINER FOR ICE CREAM CABINETS. Lloyd G. Copeman, Flint, Mich., assignor to Copeman Laboratories Co., Flint, Mich., a Corporation of Michigan. Filed July 5, 1929. Serial No. 375,948. 4 Claims. (Cl. 62—111.)

1. A sharp freezing container for ice cream cabinets having vertically positioned receptacles, comprising a unit having a plurality of vertically spaced shelves, a plurality of vertical stays for connecting and positioning the shelves, and one or more ice cube trays positioned on said shelves, said vertical stays being so positioned as to permit horizontal removal of a tray from a shelf as the unit is raised from the ice cream cabinet receptacle.

1,807,774. AUTOMATIC REFRIGERATION. Jay G. De Remer, Greenwich, Conn., assignor, by mesne assignments, to J. G. Deremer Research Corp., Jersey City, N. J., a Corporation of New Jersey. Filed June 8, 1926. Serial No. 114,440. 3 Claims. (Cl. 62—4.)



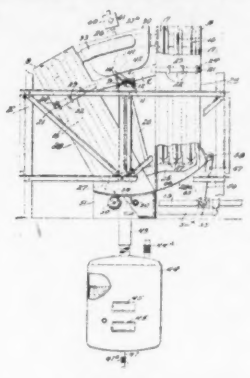
1,807,774

1. A refrigerating system comprising in combination an evaporator arranged in heat exchanging relation to the compartment to be cooled, a condenser, a compressor, a motor for driving the same and thermostatic means responsive to conditions outside said compartment for varying the capacity of the compressor.

1,807,831. SELF-CONTAINED MECHANICAL REFRIGERATOR. Ransom W. Davenport, Detroit, Mich., assignor to Chicago Pneumatic Tool Co., New York, N. Y., a Corporation of New Jersey. Filed Aug. 3, 1926. Serial No. 126,781. 3 Claims. (Cl. 62—116.)

1. A refrigerator cabinet having an insulated wall, an evaporator element upon one side of said wall, a condenser element upon the other side of said wall, and means interposed between said condenser element and said wall for reflecting the heat of said last named element.

1,807,855. OSCILLATING TYPE REFRIGERATION PLANT. Ernest B. Miller and Walter L. Edel, Baltimore, Md., assignors to The Silica Gel Corp., Baltimore, Md., a Corporation of Maryland. Filed Oct. 28, 1925. Serial No. 65,465. 18 Claims. (Cl. 62—118.)



1,807,855

1. Refrigerating apparatus of the character described, including in combination, a support, a unit comprising a pair of adsorbers charged with vapor adsorbing material balanced on said support so that alternate adsorptions and activations causes said unit periodically to tilt, first one way and then the other, an evaporator containing an evaporable liquid, means to place said evaporator alternately in communication with said absorbers, and means controlled by said tilting movement to activate each absorber when it is disconnected from said evaporator.

1,807,871. REFRIGERATING APPARATUS. Osborne I. Price, Frederick, Md., assignor to John S. McCarthy, Weehawken, N. J. Filed April 20, 1925. Serial No. 24,599. Renewed Oct. 28, 1930. 16 Claims. (Cl. 62—115.)

1. A refrigeration apparatus comprising in combination a compressing mechanism, a driving mechanism, a housing enclosing said driving mechanism and having a depending portion thereon supporting said compressing mechanism, said driving mechanism comprising a motor, an extended shaft on said motor journaled in said depending portion and connected with said compressing mechanism, a condensing chamber surrounding said depending portion, means for cooling said condensing chamber, a port in said depending portion connecting said housing with said compressing mechanism, port means connecting said compressing mechanism with said condensing chamber, means permitting gaseous refrigerant to flow through said driving mechanism in said housing, whereby said compressing mechanism operates to force said refrigerant, under pressure, into said condensing chamber for liquefying said refrigerant, and means for utilizing said refrigerant for absorbing heat.

1,807,872. REFRIGERATION APPARATUS. Osborne I. Price, Frederick, Md., assignor to John S. McCarthy, Weehawken, N. J. Original application filed Oct. 20, 1925. Serial No. 24,599. Divided and this application filed Jan. 16, 1931. Serial No. 509,232. 4 Claims. (Cl. 62—115.)

1. In a refrigerating apparatus the combination of a driving mechanism, a compressing mechanism actuated by said driving mechanism, a casing for said compressing mechanism, a cooling coil outside of said casing for receiving compressed medium from the compressing mechanism, a connection from the cooling coil to said casing for discharging cooled compressed medium from said coil into said casing, and discharge means for medium compressed by said compressing mechanism and discharged into said casing from said cooling coil.

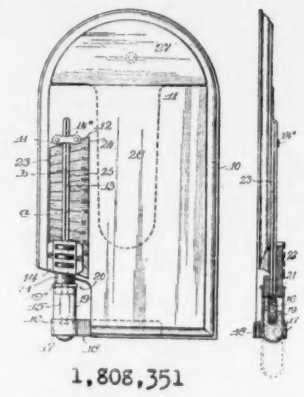
1,808,056. REFRIGERATING SYSTEM. Robert J. Mitchell, Kent, Ohio. Filed May 9, 1929. Serial No. 361,781. 3 Claims. (Cl. 62—5.)

1. A refrigeration system comprising a still-absorber, a condenser and a receiver-evaporator orbitally connected; valves respectively between the still-absorber and condenser; between the condenser and receiver, and between the receiver and still-absorber; a heater for the still-absorber, means responsive to low content in the receiver, and to temperature thereadjacent to control the heater, corresponsive means to control the valves between the still-absorber and condenser, and between the condenser and receiver, to open said valves during distillation and close them during the period of evaporation, and means to control the valve between the receiver and still-absorber to close the same during distillation periods and open the same during evaporation periods.

1,808,331. EVAPORATOR COIL. Robert S. Wheaton, Milwaukee, Wis., assignor to The Vilter Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed May 26, 1930. Serial No. 455,730. 4 Claims. (Cl. 62—126.)

1. A refrigerating coil, comprising a plurality of spaced, superimposed tubes having closed ends, short tubular connections between one set of end portions of said superimposed tubes, each of said tubular connections extending from the bottom portion of a tube above through and terminating slightly above the lower inner portion of a tube below and adjacent tubular connections being offset one from another, short tubular connections between the other set of end portions of said superimposed tubes, each of said last mentioned tubular connections extending from an upper portion of a tube below through and terminating slightly below the upper inner portion of a tube above and each of said last mentioned tubular connections being offset from an adjacent tubular connection, a fluid inlet pipe entering one of said tubes, and a fluid outlet pipe extending from one of said tubes.

1,808,351. PSYCHROMETRIC DEVICE. Earl Vernon Hill, Chicago, Ill. Filed May 31, 1927. Serial No. 195,393. 1 Claim. (Cl. 73—24.)



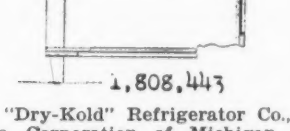
1,808,351

A psychrometric instrument comprising a base, a thermometer with a bull at its bottom end mounted on said base, a scale associated therewith, means providing a stopper fixed to said thermometer above said bulb, a wick on the bulb of said thermometer, a water containing cup enclosing said wick-covered bulb and normally held in closed relation with respect to said bulb by its engagement with said stopper, and a supporting device carried by the base below said bulb, said supporting device and cup having parts adapted to interengage to support said cup when said cup is depressed below said stopper to expose said wick to the surrounding air.

1,808,374. REFRIGERATING APPARATUS. Harry Alexander Phillips, Knoxville, Tenn. Filed Nov. 26, 1928. Serial No. 321,777. 18 Claims. (Cl. 62—126.)

1. A refrigeration unit comprising a liquid header, a gas header, a refrigerating coil communicating with said headers, a float chamber communicating with said headers, a valve for admitting liquid refrigerant directly into said liquid header, and a float in said chamber for controlling said valve.

1,808,443. REFRIGERATED COUNTER. William C. Whitcher, Niles, Mich., assignor



1,808,443

to The "Dry-Kold" Refrigerator Co., Niles, Mich., a Corporation of Michigan. Filed Dec. 5, 1927. Serial No. 237,730. 13 Claims. (Cl. 62—37.2.)

1. A refrigerator structure comprising a compartment for the articles to be refrigerated, a second compartment extending along the underside of said first-named compartment with its forward portion vertically constructed, a refrigerating medium located in the rear portion of said second compartment below said first-named compartment and spaced from walls of said compartment, the top of said second compartment being apertured at its front and rear portions to afford communication between said compartments.

1,808,494. REFRIGERATING PROCESS. Samuel C. Carney, Tulsa; Robert E. Baker, Drumright, and Frank C. Cutting, Tulsa, Okla., assignors to Shell Petroleum Corp., a Corporation of Virginia. Filed Feb. 15, 1926. Serial No. 88,489. 3 Claims. (Cl. 62—178.)

1,808,510. REFRIGERATING APPARATUS OF THE ABSORPTION TYPE. Friedrich Wilhelm Heinrich Reehsing, Bremen, Germany, assignor to Aktiebolaget Absorbator, Stockholm, Sweden, a Limited Co. Filed Jan. 23, 1928. Serial No. 248,790, and in Sweden, July 1, 1927. 6 Claims. (Cl. 62—120.5.)

1,808,604. REFRIGERANT COMPOSITION. Walter A. Kuenzli, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed June 18, 1930. Serial No. 462,152. 9 Claims. (Cl. 23—5.)

9. A refrigerant of the liquid gas phase type containing acrolein.

1,808,723. REFRIGERATION. Carl Georg Munters, Stockholm, Sweden, assignor to Electrolux Servel Corp., New York, N. Y., a Corporation of Delaware. Filed Aug. 28, 1926. Serial No. 132,160, and in Germany, July 26, 1926. 28 Claims. (Cl. 62—119.5.)

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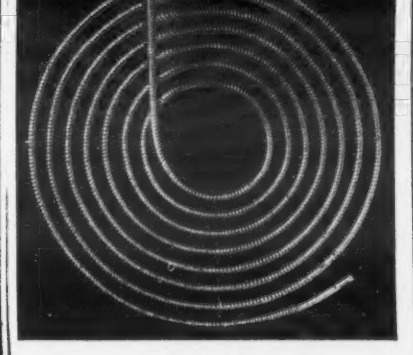

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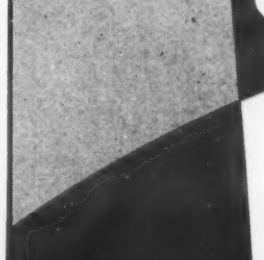

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